

## ATCLab Release Notes

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**Version:** 2.4.5.19

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_19

**Release Date:** Sunday 30<sup>th</sup> August 2015

**Notes:**

- Fixed bug in the interruption task where the initial countdown value is displayed after the initial display when the show\_timer is set to false
- Added <atc:clock> child XML element to <atc:ui> in a trial task to allow an experimenter to show or hide the in trial clock. The details of the new XML element is detailed in the table below:

New/Modified Element	Parent Element	Description	Values	Description	Example
<atc: clock >	<atc:ui>	Toggles whether the in-trial clock is displayed	'true' or 'false'		<atc:ui atc:idx='ui001'> <atc:clock>false</atc:clock> </atc:ui>

## ATCLab Release Notes

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**Version:** 2.4.5.18

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_18

**Release Date:** Thursday 20<sup>th</sup> August 2015

### Notes:

- Added <atc:initial\_display> child XML element to <atc:interruption> task to allow an experimenter to show an initial display during an external interruption task. The details of the new XML element is detailed in the table below:

New/Modified Element	Parent Element	Description	New/Modified Attributes	Attribute Values	Description	Example
<atc: initial_display >	<atc:interruption>	Specifies initial display parameters in the blank screen for an external interruption task	atc:symbol atc:font atc:font_size atc:font_colour atc:duration_ms atc:show_timer atc:x atc:y	[alpha-numeric character] [Font name] [Font size] [Font colour] [Duration in milliseconds] true/false [X coordinate of symbol] [Y coordinate of symbol]	Symbol to display Font name Font size Font colour Duration in milliseconds Whether to show countdown timer X coordinate of symbol Y coordinate of symbol	<atc:interruption atc:start='5' atc:end='15' atc:auto_handoff='true' atc:auto_accept='true' atc:show_blank_screen='true' atc:show_timer='true'> <atc:initial_display atc:symbol='+' atc:font='Courier' atc:font_size='50' atc:font_colour='white' atc:duration_ms='5000' atc:show_timer='false' atc:x='840' atc:y='525'/> </atc:interruption>

- Added <atc:info\_box> child XML element to <atc:trial> to allow an experimenter to display a text box in a trial to display any scriptable text.

New/Modified	Parent Element	Description	New/Modified	Attribute Values	Description	Example
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Element			Attributes			
<atc: info_box >	<atc:trial >	Specifies a textbox to be displayed during a trial.	atc:x atc:y atc:font atc:font_size atc:font_colour atc:border	[X coordinate of info box] [Y coordinate of info box] [Font name] [Font size] [Font colour] true/false	X coordinate of info box Y coordinate of info box Font name Font size Font colour Whether to show a border around the info box	<atc:info_box atc:x='0' atc:y='0' atc:font='Courier New' atc:font_size='50' atc:font_colour='blue' atc:border='true'>Primary Scenario</atc:info_box>

## ATCLab Release Notes

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**Version:** 2.4.5.17

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_17

**Release Date:**

**Notes:**

- Updated N back task stimuli generation to check that selected stimuli is not the same as the previous stimuli for the first N stimuli. This prevents the same value stimuli being presented consecutively.

## ATCLab Release Notes

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**Version:** 2.4.5.16

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_16

**Release Date:**

**Notes:**

- Changed instruction task text box to only allow alpha-numeric characters

## ATCLab Release Notes

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**Version:** 2.4.5.15

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_15

**Release Date:**

**Notes:**

- Added section in the output CSV log for scoring for each trial with a grand total. An example output is as follows:

Trial	Total Score
test2	30
test1	-10
test3	40
Total	60

- Re-implemented unique recall number for each text box in the instruction task for each trial

## ATCLab Release Notes

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**Version:** 2.4.5.14

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_14

**Release Date:**

**Notes:**

- Added scriptable option to disable the double clicking on aircraft to rotate the aircraft text details

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XML Element	Attributes	Description	Values
*****			
atc:trial		Parent XML element.	
	atc:disable_callout_rotation	Enable/disable double click to rotate aircraft details	True, False

Example:

```
<atc:trial atc:idx='test2' atc:param='default' atc:map="map1" atc:sky="script2" atc:ui="ui001" atc:notify_missed_acceptance='false'
atc:notify_missed_handoff='false' atc:disable_callout_rotation='true'>
```

## ATCLab Release Notes

- Modified nback task to allow sub second timing in the displaying of the initial screen and stimuli. The following changes in XML attributes have been made

\*\*\*\*\*

Parent XML	Original Attribute	New Attribute	Note
*****			
initialDisplayElement	duration	duration_ms	This element now specifies the duration to display the initial screen in milliseconds rather than seconds
stimuliElement	display_duration	display_duration_ms	This element now specifies the duration to display the stimuli in milliseconds rather than seconds

Example:

```
<atc:nbackTask atc:start='1' atc:end='72' atc:auto_handoff='true' atc:auto_accept='true' atc:background_colour='black' atc:response_key='space'
atc:n_factor='2' atc:repetition_probability='40' atc:show_task='true'>
  <atc:initial_display atc:symbol='+' atc:font='Courier' atc:font_size='50' atc:font_colour='white' atc:duration_ms='3000' atc:show_timer='true'
atc:x='487' atc:y='330' />
  <atc:stimuli atc:font='SansSerif' atc:font_size='50' atc:font_colour='white' atc:display_duration_ms='1500' atc:show_timer='true' atc:x='487'
atc:y='330' />
  ...
</atc:nbackTask>
```

- Fixed bug in the instruction task which would only write the results in the instruction task text box for every second instruction



## ATCLab Release Notes

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**Version:** 2.4.5.13

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_13

**Release Date:**

**Notes:**

- Decreased the aircraft acceptance time window from 20 seconds to 15 seconds

## ATCLab Release Notes

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**Version:** 2.4.5.12

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_12

**Release Date:**

### Notes:

- Added logging of interruption tasks to the output .xml file. The output XML logging are described below:

\*\*\*\*\*

XML Element	Description	Values
*****		
interruption_type	Type of interruption	"Interruption" or "NBack"
start_time	Programmed start time of interruption	
end_time	Programmed end time of interruption	
show_full_screen	Whether the task was shown in full screen	0 = no, 1 = yes
external_program	Name of external program that was run	
auto_accept	Whether aircraft were auto accepted during interruption	0 = no, 1 = yes
auto_handoff	Whether aircraft were auto handed off during interruption	0 = no, 1 = yes

- Added logging of interruption tasks to the output .csv file. The output fields are described below:

Field	Description	Values
Trial	Name of the trial that the interruption occurred in	
Interruption Type	Type of interruption	"Interruption" or "NBack"
Start Time	Programmed start time of interruption	
End Time	Programmed end time of interruption	
Show Full Screen	Whether the task was shown in full screen	0 = no, 1 = yes
External Program	Name of external program that was run	
Auto Accept	Whether aircraft were auto accepted during interruption	0 = no, 1 = yes
Auto Handoff	Whether aircraft were auto handed off during interruption	0 = no, 1 = yes

- Added additional field in the aircraft flash details section of the output .csv file called "Automatic" to indicate if an aircraft is automatically accepted or handed off. Values are 0 (not automatic) or 1 (automatic acceptance/handoff)
- Added logging of reminder box dismiss button times to the output .xml file. The output XML logging are described below:

XML Element	Description	Values
reminder_box	Tag to indicate that the reminder box dismiss button was pressed	Aircraft callsign that had the dismiss button pressed
dismiss_button	Tag to indicate that the reminder box dismiss button was pressed	"pressed"
clicked_time	Millisecond time that the dismiss button was pressed	

- Added logging of reminder box dismiss button times to the output .csv file. The output fields are described below:

*****		
Field	Description	Values
*****		
Trial	Name of the trial that the dismiss button was pressed	
Callsign	Aircraft callsign that had the dismiss button pressed	
Dismiss Time	Time in seconds into the trial that the dismiss button was pressed	
Dismiss Time HP	Time in milliseconds into the trial that the dismiss button was pressed	

- Added calculation of Nback task results based on participant's inputs/non-inputs in the N back task. The are described as follows:

*****	
Result	Description
*****	
Hit	Participant correctly responds to a stimuli that was the same as the stimuli N times before
Miss	Participant fails to respond to a stimuli that was the same as the stimuli N times before
Correct rejection	Participant correct ignores the stimuli which is not the same as the stimulus N times before
False alarm	Participant incorrectly responds to a stimuli that was not the same as the stimuli N times before

- Added logging of N back task results to the output .xml file. The output XML logging are described below:

*****		
XML Element	Description	Values
*****		
NBackTask_response	Stimuli order of the stimuli that was presented	
stimuli	The actual stimuli that was displayed to the participant	
response	The result of the participant's response	hit, miss, false_alarm, correct_rejection

- Added logging of N back task results to the output .csv file. The output fields are described below:

*****		
XML Element	Description	Values
*****		
Trial	Name of the trial that the N back response was generated in	
Stimuli Number	Stimuli order of the stimuli that was presented	
Stimuli	The actual stimuli that was displayed to the participant	
Response	The result of the participant's response	hit, miss, false_alarm, correct_rejection

- Added a count down timer for the blank interruption task. It can be enabled/disabled with the XML below:

XML Element	Attribute	Description	Values
atc:interruption	atc:show_timer	Enable/disable countdown timer in the blank interruption task	'true' or 'false'

Example:

```
<atc:interruption atc:start='3' atc:end='21' atc:auto_handoff='true' atc:auto_accept='false' atc:show_blank_screen='true'
atc:show_timer='true' atc:external_program='"calc.exe"'/>
```

- Added ability to enable/disable error pop up dialogs when a participant misses an aircraft acceptance or handoff. This can be achieved with the XML below:

XML Element	Attribute	Description	Values
atc:trial	atc:notify_missed_acceptance	Enable/disable pop up error dialog when a participant misses an acceptance	'true' or 'false'
	atc:notify_missed_handoff	Enable/disable pop up error dialog when a participant misses a handoff	'true' or 'false'

Example:

```
<atc:trial atc:idx='test2' atc:param='default' atc:map='map1' atc:sky='script2' atc:ui='ui001' atc:notify_missed_acceptance='false'
atc:notify_missed_handoff='false'>
```

## ATCLab Release Notes

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**Version:** 2.4.5.11

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_11

**Release Date:**

### Notes:

- Added N Back Task to display random numbers at a set interval as a distraction to the ATC task. The N Back task is displayed in full screen and covers the ATC task which continues to run in the background. The N Back task can be specified with XML as detailed in the table below:

\*\*\*\*\*

XML Element	Attributes	Description
*****		
atc:nbackTask		N Back Task parent XML element.
	atc:start	Time in seconds into the ATC task to display the N Back task.
	atc:end	Time in seconds into the ATC task to stop showing the N Back task.
	atc:auto_handoff	Determines whether aircraft are automatically handed off while N Back task is running ('true' or 'false').
	atc:auto_accept	Determines whether aircraft are automatically accepted while N Back task is running ('true' or 'false').
	atc:background_colour	Set the background colour of the N Back task screen ('black', 'white', 'blue', 'red', 'green').
	atc:response_key	The key that a participant needs to press to respond in the N Back task ('space' or an alpha-numeric key).
	atc:n_factor	The Nth number prior to the current stimuli that needs to be recognized as a match.

atc:reptition_probability	The probability that the current stimuli matches the stimuli Nth number previously shown.
atc:show_task	Toggles if the N Back task is to be displayed. Used to test what is happening to ATC while the N Back task is running ('true' or 'false').
atc:initial_display	Sub-element of <atc:nbackTask>. Specifies the initial character to be displayed before the stimuli are presented. User cannot make a response during this state.
atc:symbol	An alpha-numeric character to be displayed initially.
atc:font	Name of the font to display the initial symbol in. ('Courier', 'Helvetica', 'SansSerif', 'Times', 'Serif', 'TypeWriter', 'OldEnglish', 'Decorative', 'System')
atc:font_size	Font size for the initial display to be displayed in.
atc:font_colour	Font colour of the initial display ('black', 'white', 'blue', 'red', 'green').
atc:duration	Duration in seconds for the initial display to be shown for.
atc:show_timer	Show/Hide the countdown timer before the first stimuli is shown ('true' or 'false').
atc:x	Horizontal position of the initial display symbol in pixels.
atc:y	Veritcal position of the initial display symbol in pixels.
atc:stimuli	Sub-element of <atc:nbackTask>. Specifies the stimuli presentation details.
atc:font	Name of the font to display the initial symbol in. ('Courier', 'Helvetica', 'SansSerif', 'Times', 'Serif', 'TypeWriter', 'OldEnglish', 'Decorative', 'System')
atc:font_size	Font size for the initial display to be displayed in.
atc:font_colour	Font colour of the initial display ('black', 'white', 'blue', 'red', 'green').
atc:display_duration	Duration in seconds for each stimuli to be displayed for.
atc:show_timer	Show/Hide the countdown timer before the next stimuli is shown ('true' or 'false').
atc:x	Horizontal position of the stimuli in pixels.
atc:y	Veritcal position of the stimuli in pixels.
atc:correct_feedback	Sub-element of <atc:nbackTask>. Specifies the user feedback when they respond correctly.
atc:symbol	The symbol to be displayed when a user correctly identifies a stimuli as an N back stimuli ('circle', 'square').



	atc:colour	Colour of the feedback symbol ('black', 'white', 'blue', 'red', 'green').
	atc:width	Width of the feedback symbol.
	atc:height	Height of the feedback symbol.
	atc:x	Horizontal position of the feedback symbol in pixels.
	atc:y	Vertical position of the feedback symbol in pixels.
atc:incorrect_feedback		Sub-element of <atc:nbackTask>. Specifies the user feedback when they respond incorrectly.
	atc:symbol	The symbol to be displayed when a user incorrectly identifies a stimuli as an N back stimuli ('circle', 'square'). If the user responds within the first N stimuli, it is also considered as incorrect.
	atc:colour	Colour of the feedback symbol ('black', 'white', 'blue', 'red', 'green').
	atc:width	Width of the feedback symbol.
	atc:height	Height of the feedback symbol.
	atc:x	Horizontal position of the feedback symbol in pixels.
	atc:y	Vertical position of the feedback symbol in pixels.
atc:timer		
	atc:font	Name of the font to display the count down timer in. ('Courier', 'Helvetica', 'SansSerif', 'Times', 'Serif', 'TypeWriter', 'OldEnglish', 'Decorative', 'System')
	atc:font_size	Font size for the count down timer to be displayed in.
	atc:font_colour	Font colour of the count down timer ('black', 'white', 'blue', 'red', 'green').
	atc:x	Horizontal position of the count down timer in pixels.
	atc:y	Vertical position of the count down timer in pixels.

Example:

```
<atc:trial atc:idx='test2' atc:param='default' atc:map="map1" atc:sky="script2" atc:ui="ui001">
  <atc:timeEvent>300</atc:timeEvent>
  <atc:nbackTask atc:start='2' atc:end='180' atc:auto_handoff='true' atc:auto_accept='true' atc:background_colour='black'
atc:response_key='space' atc:n_factor='2' atc:repetition_probability='40' atc:show_task='true'>
    <atc:initial_display atc:symbol='+' atc:font='Courier' atc:font_size='50' atc:font_colour='white' atc:duration='3' atc:show_timer='true'
atc:x='487' atc:y='330' />
    <atc:stimuli atc:font='SansSerif' atc:font_size='50' atc:font_colour='white' atc:display_duration='2' atc:show_timer='true' atc:x='487'
atc:y='330' />
    <atc:correct_feedback atc:symbol='circle' atc:colour='green' atc:width='15' atc:height='15' atc:x='500' atc:y='410' />
    <atc:incorrect_feedback atc:symbol='square' atc:colour='red' atc:width='15' atc:height='15' atc:x='500' atc:y='410' />
    <atc:timer atc:font='SansSerif' atc:font_size='20' atc:font_colour='white' atc:x='465' atc:y='450' />
  </atc:nbackTask>
</atc:trial>
```

## ATCLab Release Notes

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**Version:** 2.4.5.10

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_10

**Release Date:**

**Notes:**

- Modified aircraft behaviour such that if aircraft are ready to be accepted (flashing orange) or ready to be handed off (flashing blue) at the time of interruption, that aircraft will automatically be accepted or handed off.

## ATCLab Release Notes

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**Version:** 2.4.5.9

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_9

**Release Date:**

### Notes:

- Implemented scriptable external program that can be run during the interruption period. An experimenter can specify the name of the .exe file without the full path or include the full path to the executable enclosed between double quotes ("")

\*\*\*\*\*

XML Element	Attributes	Description
atc:interruption	atc:external_program	Name of executable or full path to executable

Example:

```
<atc:trial atc:idx='test1' atc:param='default' atc:map="map1" atc:sky="script1" atc:ui="ui001">
  <atc:timeEvent>300</atc:timeEvent>
  <atc:interruption atc:start='60' atc:end='180' atc:auto_handoff='true' atc:auto_accept='true'
    atc:show_blank_screen='false'
    atc:external_program="C:\Program Files\Windows NT\Accessories\wordpad.exe"/>
</atc:trial>
```

## ATCLab Release Notes

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**Version:** 2.4.5.8

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_8

**Release Date:**

### Notes:

- Implemented scriptable interruption task with configurable start time, end time, automatic aircraft acceptance, automatic aircraft handoff and the displaying of a full black screen

\*\*\*\*\*

XML Element	Attributes	Description
*****		
atc:interruption	atc:start	Trial time when the interruption begins
	atc:end	Trial time when the interruption ends
	atc:auto_handoff	Set if aircraft are automatically handed off during the interruption (true/false)
	atc:auto_accept	Set if aircraft are automatically accepted during the interruption (true/false)
	atc:show_blank_screen	Set if a full black screen is to be displayed to hide the aircraft simulation (true/false)
	atc:external_program	Not implemented yet

Example:

```
<atc:trial atc:idx='test2' atc:param='default' atc:map="map1" atc:sky="script2" atc:ui="ui001">  
  <atc:timeEvent>300</atc:timeEvent>  
  <atc:interruption atc:start='40' atc:end='180' atc:auto_handoff='false' atc:auto_accept='false' atc:show_blank_screen='true'  
atc:external_program='c:\' />  
</atc:trial>
```

## ATCLab Release Notes

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**Version:** 2.4.5.7

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_7

**Release Date:**

**Notes:**

- Fixed two issues:
  - 1) Canvasview grabs all the keypress events which causes other widgets like the altitude selection tool to not be able to be escaped
  - 2) When aircraft are set with a customized handoff key, the default handoff key 'h' is not usable for handoff

## ATCLab Release Notes

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**Version:** 2.4.5.6

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_6

**Release Date:**

**Notes:**

- Implemented a scriptable handoff keys for individual aircraft. The default handoff key is still the 'h' key.

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XML Element	Description
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atc:handoffKey	Specifies the key that will be used to handoff an aircraft instead of the default 'h' key. E.g. "w" For special non-character keys, the following are supported: <ul style="list-style-type: none"><li>- "key_up" - Up arrow</li><li>- "key_down" - Down arrow</li><li>- "key_left" - Left arrow</li><li>- "key_right" - Right arrow</li></ul>
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Example:

```
<atc:aircraft atc:idx="PM2" atc:type="A320">
  <atc:start>0</atc:start>
  <atc:altitude>46000</atc:altitude>
<atc:altitudeChangeEnableTime>20</atc:altitudeChangeEnableTime>
  <atc:velocity>450</atc:velocity>
  <atc:flightpath>
    <atc:point atc:x='38' atc:y='30.86' />
    <atc:point atc:x='30.6458' atc:y='24.2536' />
    <atc:point atc:x='23.7007' atc:y='18.0156' />
    <atc:point atc:x='23.7115' atc:y='0' />
  </atc:flightpath>
  <atc:acceptedStateFlashParams>
    <atc:flashItem>fl</atc:flashItem>
    <atc:colour>red</atc:colour>
  </atc:acceptedStateFlashParams>
  <atc:coordinationRequest atc:key='9'>
    <atc:show>true</atc:show>
  </atc:coordinationRequest>
  <atc:handoffkey>key_left</atc:handoffkey>
</atc:aircraft>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5.5

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_5

**Release Date:**

**Notes:**

- Implemented a scriptable altitude change time restriction for aircraft.

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XML Element	Description
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atc:altitudeChangeEnableTime	Specifies the time an aircraft's altitude selection list can be enabled
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Example:

```
<atc:aircraft atc:idx="PM2" atc:type="A320">
  <atc:start>0</atc:start>
  <atc:altitude>46000</atc:altitude>
  <atc:altitudeChangeEnableTime>20</atc:altitudeChangeEnableTime>
  <atc:velocity>450</atc:velocity>
  <atc:flightpath>
    <atc:point atc:x='38' atc:y='30.86' />
    <atc:point atc:x='30.6458' atc:y='24.2536' />
    <atc:point atc:x='23.7007' atc:y='18.0156' />
    <atc:point atc:x='23.7115' atc:y='0' />
  </atc:flightpath>
  <atc:acceptedStateFlashParams>
    <atc:flashItem>fl</atc:flashItem>
    <atc:colour>red</atc:colour>
  </atc:acceptedStateFlashParams>
  <atc:coordinationRequest atc:key='9'>
    <atc:show>true</atc:show>
  </atc:coordinationRequest>
</atc:aircraft>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5.4

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_4

**Release Date:**

**Notes:**

- Implemented a scriptable dismiss button for aircraft reminder boxes.

\*\*\*\*\*

XML Element	Description	Attributes	Description
*****			
atc:dismissButton			
		enable_time	Time in the simulation to enable the dismiss button
		label	The text to display on the dismiss button
		fontSize	The font size of the text to be displayed on the dismiss button
		width	The width of the dismiss button in pixels
		height	The height of the dismiss button in pixels
		posX	The horizontal distance from the centre of the aircraft to the top left corner of the dismiss button in pixels
		posY	The vertical distance from the centre of the aircraft to the top left corner of the dismiss button in pixels

Example:

```
<atc:reminderBox atc:bgColor="darkOrange" atc:width='380' atc:height='70' atc:aircraft='C69' atc:posX='10'  
  atc:posY='10' atc:displayText="This is just a test" atc:displayTextSize='20'>  
  <atc:displayTime atc:startTime='0' atc:endTime='600'/>  
  <atc:flashColor>darkOrange</atc:flashColor>  
  <atc:flashColor>darkOrange</atc:flashColor>  
  <atc:flashTime atc:startTime='15' atc:endTime='600'/>  
  <atc:dismissButton atc:enable_time='10' atc:label="Multiple reminderboxes" atc:fontSize='10' atc:width='120' atc:height='30' atc:posX='20'  
  atc:posY='70'/>  
</atc:reminderBox>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5.3

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_3

**Release Date:**

**Notes:**

- Implemented scriptable sound file for trial tasks which allow a .wav file to be played while the trial is running.

\*\*\*\*\*

XML Element	Value	Description
*****		
atc:sound	[String]	The full path to sound file in .wav format to be played for the trial. Note, the sound file will be stopped if its duration is longer than the trial duration.

Example:

```
<atc:trial atc:idx='test1' atc:param='default' atc:map="map1" atc:sky="scriptt1" atc:ui="ui001" atc:sound="C:\Documents and Settings\Aaron
Yeung\My Documents\Key Centre For Human Factors\Work\Source\atc_lab\Debug\incorrect.wav">
  <atc:timeEvent>300</atc:timeEvent>
</atc:trial>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5.2

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_2

**Release Date:**

**Notes:**

- Implemented scriptable update\_rate and update\_multiplier for the engine clock.

\*\*\*\*\*

XML Element	Value	Description
*****		
update_rate	[Integer]	The rate (in ms) that the clock should update
update_multiplier	[Integer]	The multiples the clock should count in. E.g. a value of 2 means the clock will update in multiples of 2 (Twice as fast)

Example:

```
<atc:param atc:idx='default'>  
  <atc:sectorEntryDistance>5</atc:sectorEntryDistance>  
  <atc:sectorExitDistance>0</atc:sectorExitDistance>  
  <atc:update_rate>1000</atc:update_rate>  
  <atc:update_multiplier>2</atc:update_multiplier>  
  <atc:horizontal_doms>5</atc:horizontal_doms>  
  <atc:vertical_doms>0</atc:vertical_doms>  
</atc:param>
```



## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5.1

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:** atclab-rel-2\_4\_5\_1

**Release Date:**

**Notes:**

- Branched off from version 2.4.5
- Added millisecond timer using the hosts high performance counter (if it exists). Timing in the resulting log file is encased in the <hpc\_elapsed\_time> XML tag. Also added millisecond fields in the CSV log file.

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.5

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:** atclab-rel-2\_4\_5\_branch

**CVS Tag:**

**Release Date:**

**Notes:**

Added XML sub-element to acceptedStateFlashParams element called flashColour. This was used instead of the equivalent element 'colour' for acceptedStateFlashParams because Shayne had many scripts with <acceptedStateFlashParams><colour>red</colour></acceptedStateFlashParams> but did not want those aircrafts to be red. So had to add a new element so that only the few aircrafts that need to flash red would be shown as red. The aircrafts with <colour>red</colour> would be ignored and default to flash orange

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.4

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:**

**CVS Tag:**

**Release Date:**

### Notes:

- Removed functionality added in v2.4.3 where an experimenter could change the flash colour to be red when an aircraft is in a proposed state.
- Removed XML script elements

\*\*\*\*\*

XML Element	Description	Attributes	Description
*****			
<acceptedStateFlashParams>		colour	The colour an aircraft is to flash when in the proposed state ready to be accepted. (Orange by default)

Example:

```
<atc:acceptedStateFlashParams>
  <atc:colour>red</atc:colour>
</atc:acceptedStateFlashParams>
```

Added more flexible checks in the instruction screen's recall tasks. The instruction task now removes leading, trailing and duplicate spaces in the entered text and converts to all uppercase (The same is applied to the answer that is scripted into the instruction task).

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.3

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:**

**CVS Tag:**

**Release Date:** Thursday 20<sup>th</sup> August 2015

**Notes:**

- Modified the Excel logger to write the files when the trial ends (either by timing out or by pressing 'alt+ctrl+n') rather than just when the trial times out.

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.2

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:**

**CVS Tag:**

**Release Date:**

### Notes:

- Fixed problem with canvasview not taking focus so that keypresses were not working for onscreen sprites. This was fixed by calling canvasview's setFocus() method after task::showEvent (which calls setFocus).
- Added functionality to allow an experimenter to script in the flash colour to be red when an aircraft is in a proposed state ready to be accepted.
- New XML script elements

\*\*\*\*\*

XML Element	Description	Attributes	Description
*****			
<acceptedStateFlashParams>		colour	The colour an aircraft is to flash when in the proposed state ready to be accepted. (Orange by default)

Example:

```
<atc:acceptedStateFlashParams>
  <atc:colour>red</atc:colour>
</atc:acceptedStateFlashParams>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.1

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:**

**CVS Tag:**

**Release Date:**

### Notes:

- Added functionality to allow reminder boxes to be attached to aircrafts
- New XML script elements

\*\*\*\*\*

XML Element	Description	Attributes	Description
*****			
<reminderBox>		aircraft	A string which represents the aircraft that the reminder box should attach to. If this is omitted then the reminder box will just be a standard reminder box that is displayed at a certain location on screen. If this attribute is specified, the posX and posY attributes then become offsets from the centre of the plane rather than coordinates on the map

Example:

```
<atc:reminderBox atc:bgColor="yellow" atc:width='420' atc:height='90' atc:posX='2080' atc:posY='880' atc:aircraft='C10'
  atc:displayText="If CallSign Greater 88/n Then Press 9" atc:displayTextSize='22'>
  <atc:displayTime atc:startTime='82' atc:endTime='102'/>
  <atc:flashColor>darkorange</atc:flashColor>
  <atc:flashTime atc:startTime='236' atc:endTime='256'/>
</atc:reminderBox>
```

## ATCLab Release Notes

\*\*\*\*\*

**Version:** 2.4.0

**Developer:** Aaron Yeung ([aaron.c.yeung@gmail.com](mailto:aaron.c.yeung@gmail.com))

**CVS Branch:**

**CVS Tag:**

**Release Date:**

**Notes:**

- Disabled the Ok pushbutton in the instruction task if the textbox is empty. This prevents participants from entering nothing in the textbox
  - Instruction tasks are now fixed so that an experimenter can specify a key to press to close an instruction screen
- Added version numbering so that particular versions of ATCLab can be easily identified in the future