

# EGH455-Team #19(Week 1)

#### MINUTES OF MEETING

Place: Author: Date:26/09/2022

Online Voice Marissa Bowen Start Time: 7pm

call End Time: 7:30pm

1. Subject: General meet and greet Total Pages: 2

# 2. Agenda:

- 1. Deciding subsystems
- 2. System requirements discussion
- 3. Deciding meeting times
- 4. Conops design

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	TBA	TBA
Connor Harvey	СН	TBA	TBA
Alex Switala	AS	TBA	TBA
Jeremy Naylor	JN	TBA	TBA
Ryan Brooker	RB	TBA	TBA
Marissa Bowen	MB	TBA	TBA

- 1. Subsystems have be decided:
  - Alex Gray (Air Quality Sensor),
  - Connor Harvey (3 Target Acquisition & Image Processing),
  - Alex Switala (3 Target Acquisition & Inage Processing),
  - Jeremy Naylor (Sampling tube),
  - Ryan Brooker (Web Visualization & Interfaces),
- Marissa Bowen (Project Manager, Enclosure Design)
   Next meeting planned for Saturday 6<sup>th</sup> 7pm online meeting
- 3. Begin working on PMP and have some drafted parts ready for email submission to Felipe

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	n10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Creating Conops draft	Connor	6 <sup>th</sup> Aug
Email Conops draft for review	Marissa	6 <sup>th</sup> Aug
Research subsystems	All group members	6 <sup>th</sup> Aug



# EGH455-Team #19(Week 2)

#### MINUTES OF MEETING

Place:	Author:	Date: 7/08/2022
Online voice call	Marissa Bowen	Start Time: 7pm
		End Time: 7:45pm
1. <u>Subject</u> : Generals updates on subsystems progress		Total Pages: 2

# 2. Agenda:

- 1. Progress made on subsystems
- 2. Anyone have any issue with subsystems
- 3. Splitting up the PMP report

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- PMP drafted section split up between people
   Next meeting planned for 9/08 (this is so that we can stay in a schedule of have constant meetings every tuesday)

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.N
Marissa Bowen	n10205993	M.B

ACTIONS		
Responsible Person	Due Date	
All group members	14/08	
All group members	14/08	
Ryan	14/08	
Jeremy	14/08	
Marissa	14/08	
Alex G	14/08	
Alex S	14/08	
Connor	14/08	
	Responsible Person  All group members  All group members  Ryan  Jeremy  Marissa  Alex G  Alex S	



# EGH455-Team #19(Week 3)

#### MINUTES OF MEETING

Place:	Author:	Date:9/08/2022
Online	Marissa Bowen	Start Time: 10pm
		End Time: 10:30pm
1. Subject:		Total Pages:

# 2. Agenda:

Check progress on PMP parts
 Progress on Prelim Reports

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Connor found out way to train data for image processing
- 2. Alex G. section 5 PMP done, and part of interface subsystem done, review coding documents for Air Quality Sensor
- 3. Have PMP draft complete by Friday (12<sup>th</sup> Aug)

## **5.** <u>Signatures</u>:

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS		
	Responsible Person	Due Date	
Continue working on PMP parts to have draft ready	All group members	12 <sup>th</sup> Friday	
Continue working on Prelim reports and subsystem designs	All group members	13 <sup>TH</sup> Friday	



# EGH455-Team #19(Week 4)

#### MINUTES OF MEETING

Place:	Author:	<b>Date:</b> 17/8/22
Online	Marissa Bowen	Start Time: 6:00pm
		End Time: 7:00pm
1. <u>Subject</u> : Chat about physical design of Enclosure		Total Pages: 2

# 2. Agenda:

- Discussing the design of the sampling tube
- Enviro+ pin layout
- Enclosure design
- Discussion of PMP status

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

Decided the how enclosure and servo is to be attached

Further discussion about integrating subsystems in tomorrow's class

Some PMP parts have been completed but other required to be started and finished so that another draft can be sent

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Continue working on subsystems	All	Next week
Continue working on PMP parts for next draft	All	Next week



# EGH455-Team #19(Week 5)

#### MINUTES OF MEETING

Place:	Author:	Date:23/8/22
Online voice call	Marissa Bowen	Start Time: 7pm
		End Time: 7:30pm
1. Subject:		<b>Total Pages:</b>

# 2. Agenda:

- Updates on everyone's preliminary design
   Proof reading PMP

  3. Attendants:

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Everyone has partially started their prelim documents
- Organised when to send have draft preliminary design
   Organised who is going to record footage of drone field room

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Have a draft prelim report ready for draft	All group members	26/8
Have a edited PMP document ready for 2 <sup>nd</sup> draft	All group members	26/8
Send drafts to Felipe	Marissa	26/8



# EGH455-Team #19(Week 6)

#### MINUTES OF MEETING

Place:	Author: Marissa Bowen	Date:30/8/2022
Online		Start Time: 7pm
		End Time: 8pm
1. Subject: Week 6 documentations		Total Pages:

# 2. Agenda:

- Updates on everyone's documents
   Reviewing feedback from Felipe

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Discussed subsystem diagram main layout for everyone to do
- 2. Discussed that Preliminary Design Subsystem Interfaces and reference documents need a consistent description style between documents
- 3. Organised when to send final preliminary design documents
- 4. Organised group get together to work on and finalise documents

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Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Continue working on subsystems	All group members	Next meeting
Continue working on Prelim documents due end of week	All group members	2/9
Submit week 6 documents	Marissa	2/9



# EGH455-Team #19(Week 7)

#### MINUTES OF MEETING

Place:	Author:	Date: 6/09/2022
6/09/2022	Marissa Bowen	Start Time: 7:00pm
		End Time: 7:30pm
1. Subject: Future plans		Total Pages:

# 2. Agenda:

1. Discussing updates on everyone's subsystems

Name	Initials	Subsystem lead	<b>Subsystem initials</b>
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

1. Due to most group members having assessment due in the next coming weeks meeting did not conclude much information

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Continue working on subsystems	All group members	Next meeting



# EGH455-Team #19(Week 8)

#### MINUTES OF MEETING

Place:	Author:	Date:13/09/2022
Online Voice	Marissa Bowen	Start Time: 7pm
call		End Time: 7:30pm
1. Subject: update	s on project	Total Pages:

# 2. Agenda:

1. Goals to complete aruco marks done this week

2. Have Connor go in for image processing for this week tut

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Come in wednesday to work on image processing Connor
- Meet on thursday to build the payload
   Communication between image processing and webserver
   Display modelling on openCV alex

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Come in during this week practical for image capture	Connor	Next week
Come in on Thursday for enclosure assemble with all components	Marissa	Next week
Continue working on subsystems	All group members	Next week



# EGH455-Team #19(Week 9)

#### MINUTES OF MEETING

Place:	Author:	Date:20/09/2022
Online Voice	Marissa Bowen	Start Time: 7:00pm
call		End Time: 7:30pm
1. Subject: Catchu	o on parts and plans for mid sem break	Total Pages: 2

# 2. Agenda:

Any issues with anyone parts
 Start working on ICD document

3. Discussing test documents

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Connor: Image set done, training is finished, now just train yolo
- 2. Alex G: Assisted in enclosure design due to difficulty in 3D printing, still working on code for temperature stuff
- 3. Ryan: live data coming through to website, get and post request for all subsystems, dynamically grab IP from pi. Have not built components for graph
- 4. Marissa: Enclosure has been changed
- 5. Alex S: ARUco markers detection working
- 6. Jeremy: Updating sampling system based off new enclosure heights.

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	
	Responsible Person	Due Date
Continue working on all subsystems	All	Next week



# EGH455-Team #19(Week

10)

#### MINUTES OF MEETING

Place:	Author:	Date: 4/10/2022
Online	Marissa Bowen	Start Time: 7pm
		End Time: 7:30pm
1. Subject: Updates on teams		Total Pages:

# 2. Agenda:

1. During updates of people over holidays,

2. Sampling system should integrate with enclosure system

3. How integration is going to work, what subsystems

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

Connor got work done on the training during holidays, more data on values, not picking up any bag or arcuno marker, doing fire extinguisher really wheel, Connor got recorded video of the training working.

Alex and Connor changed from larger of YOLO to a version of YOLO v3 tiny.

Alex displayed the skeleton code for integration of air qual, Web, Vis and Sample

Talked about how the software subsystem wants to integration with webserver earlier rather than later

Alex G, have not done humidity, have done all other calibration of sensor

1. On Holidays Marissa and Alex went into the drone access day and attempted mounting Enclosure to Drone, test successful and also got video through pi and pi camera

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	ACTIONS	
	Responsible Person	Due Date	
All Members	Work on parts	Next Meeting	
All Members	Work on Test reports	Next Meeting	
Marissa and Jeremy	Attempt mounting sample and enclosure	Next Meeting	



# EGH455-Team #19(Week

11)

#### MINUTES OF MEETING

Place:	Author:	Date:
Online	Marissa Bowen	Start Time: 6:45pm
		End Time: 7:15pm
1. Subject: talks at	pout integration plans and tests	Total Pages: 2

#### 2. Agenda:

1. Plans for integration on the 12<sup>th</sup> and maybe 13<sup>th</sup>

- 2. Have a look at webpage and see if anything needs to be changed
- 3. Discusses update about getting a new raspberry pi

#### **Discussed notes:**

Enviro Data json packet has changed in format

Discusses the graph layout on the webpage

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Deciding what type of graph is best to display the data
- 2. Arrive at uni at 9am tomorrow for integration
- 3. Getting the LCD displaying IP, image and temperature on first on Thursday
- 4. Adding more graphs into the webpage using toggle switches
- 5. Figuring communication between the sampling system and webpage
- 6. Tomorrow plan to do integration and full bench tests
- 7. Deciding to use the V3 yolo over the V5 for vision system as it is more reliable

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.N
Marissa Bowen	N10205993	M.B

ACTIONS		
Responsible Person	Due Date	
Alex G and Ryan	12/10	
Conor	12/10	
Jeremey	12/10	
All group members	12/10	
All group members	13/10	
	Responsible Person  Alex G and Ryan  Conor  Jeremey  All group members	



# Queensland University of Technology EGH455-Team #19(Week

12)

#### MINUTES OF MEETING

Place:	Author:	Date: 18/10/22
QUT O Block	Marissa Bowen	Start Time: 3:15
		End Time: 3:30
1. Subject: Discuss	sion after Demo	Total Pages:

# 2. Agenda:

1. Discuss how we are going to do test reports

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Discussing how the team think we did in the demo and what marks we reckon we got.
- 2. Drafts of final documents including test reports and final reports are due Friday
- 3. Connor is taking home the full payload so if anyone need images or testing completed ask him
- 4. Discuss how the presentation is going to go and how long we all have.

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	ACTIONS	
	Responsible Person	Due Date	
Work on test reports	All group members	21/10	
Start validation document	Marissa	21/10	



# EGH455-Team #(Week 13)

#### MINUTES OF MEETING

Place:	Author:	Date: 25/10/2022
Online	Marissa Bowen	Start Time: 7pm
		End Time: 7:30pm
1. Subject:		Total Pages: 2

# 2. Agenda:

- 1. Talk about when all documents are to be done by for proof reading
- 2. Presentation slides are to be done by Thursday
- 3. Complete ICD before presentation
- 4. Add software interfaces into ICD

Name	Initials	Subsystem lead	Subsystem initials
Alex Gray	AG	Air Quality Sensor	AQS
Connor Harvey	СН	3 Target Acquisition and Image Processing	TAIP
Alex Switala	AS	3 Target Acquisition and Image Processing	TAIP
Jeremy Naylor	JN	Sampling Tube	ST
Ryan Brooker	RB	Web Visualization and Interfaces	WVI
Marissa Bowen	MB	Project Manager and Enclosure Design	PM & ED

- 1. Jeremy needs video from connor for motor

- Talking about the marks
   Jeremy late to presentation
   Adding software Interfaces to ICD

Name	Id Number	Signature
Alex Gray	n10214992	A.G
Connor Harvey	n10205420	С.Н
Alex Switala	n10205896	A.S
Jeremy Naylor	n10219676	J.N
Ryan Brooker	n10730036	R.B
Marissa Bowen	N10205993	M.B

MINUTES OF MEETING	ACTIONS	ACTIONS	
	Responsible Person	Due Date	
Slides	All group member	27/10	
Reports done by Friday morning	All group members	28/10	
Edit tests in Acceptance test file	Marissa	27/10	