PhD Corrections

1.1 General

(KS) Terminology	Use of the word chaotic/chaos could be confusing
	Renamed initial phase of the swarms development to 'disorganised' throughout.

(KS) Split Chapter 3	hline Moved simulation into Chapter 2. Moved data aggregation into appendix.

1.2 Abstract

(KS) typo	nodes
	agents

1.3 Introduction

(KS) Section 1.1 explan boid-based	boid-based
	Paragraph extended to include reference and comparison

(KS) Section 1.3 typo	fire service [111], as
	fire service [111] as

(KS) Section 1.5	anomalies 'healing'
	anomalies thus 'healing'

(KS) Section 1.5	clarify Hoff reference
	extended sentence to include message propogation reduction

1.4 Bibliography

(PJ & KS) Dates in references are appearing twice	References 6, 7, 9, 10, 11, 12, 14, 15, 16, 18, 20, 24, 25, 28, 33, 37, 41, 47, 50, 52, 54, 55, 56, 58, 59, 61, 65, 67, 69, 71, 74, 76, 77, 78, 79, 82, 86, 90, 93, 94, 96, 98, 100, 113, 118, 126, 127, 130, 137, 139, 140, 141, 142, 146, 147, 150, 151, 152, 154, 155, 156, 157, 158, 161
	?

(KS) No dates	References 21, 60, 70, 75, 92, 135
	?

(KS) References with no publisher	References 27, 30, 36, 42, 44, 48, 49, 51, 52, 53, 57, 60, 63, 68, 73, 81, 83, 84, 87, 88, 89, 101, 103, 108, 109, 115, 132, 149
	?

(KS) References with capitalised Author	References 88, 149
	?
(KS) References requiring page numbers	Reference 117
	?

1.5 Abstract

1.6 Introduction

1.7 Methods Techniques Tools

(PJ) Clarify	The coordinates of an agent
	The position vector is given by the coordinates of an agent
(KS) Section 2.3	described in 2.2
	extended to include vectors
(PJ) Citations sections 2.1, 2.7	Separate references
	Split references from Barnes and Bennet appropriately
(PJ/KS) Typo	Section 2.3 interction
	interaction
(PJ) Incorrect reference	Figure 2.6 shows the...
	Equation 2.5 shows ...
(KS) Incorrect reference	(Figures 2.10, 2.10, 2.11)..
	(Figures 2.10, 2.11, 2.12)..
(PJ) Formulae 2.1, 2.3, 2.4 - Formula notation	Cardinality notation changed to use $\|.\|$
	$nbr(b) \stackrel{\Delta}{=} \{b' \in S \; : \; |bb'| <= C_b\}$ $R(b) = \{b' \in S \; : \; |bb'| <= R_b\}$ $v_r(b) = -\frac{1}{|R(b)|}\left(\sum_{b' \in R(b)}\left(1 - \frac{|bb'|}{R_b}\right)bb'\right)$ $\{o \in O \; : \; |bo| <= O_b\}$
(PJ) Section 2.6 - Sentence restructure	moves an obstacles
	moves it may enter an obstacle's
(PJ) Section 2.8 - Special case reference error	Special case of Equation 2.7
	Special case of Equation 2.8

(PJ) Spelling	Section 2.11
	amp Figure 2.12 Stabalise
	Stabilise

| (PJ) Expand Conclusion | No mention of current work |
| | Added small discussion of current work |

| (PJ) Explain ˆ | Section 2.6 uses unexplained notation |
| | Moved ˆ explanation from section 2.9 to 2.6 |

| (PJ) No equation | Section 2.9 uses inline formulae for movement. |
| | Equation broken out and referenced. |

1.8 Simulator

| (PJ) Consistency in capitalisation | Player/Stage |
| | player/stage |

1.9 Magnitude Metric

| (KS) Table 4.1 → 3.1 Explain parameters | Hexagonal |
| | Modified labels and altered section to highlight that the parameters are arbitrary as they are only required to create a swarm to highlight the inter-agent relationships that exist. |

| (KS) Typos | swarms |
| | swarm's |

| (PJ) Table 4.2 → 3.2 Explain Labels | Log, Id, N.Id |
| | Labels expanded in text |

| (PJ) Section 4.2 → 3.2 Sentence error | vectorTable 4.4 |
| | vector. Table 4.4 |

| (PJ) Section 4.3 → 3.3 Punctuation | = 0) The |
| | = 0). The |

| (PJ) Diagram 4.7 → 3.7 Label error | bot |
| | agent |

(KS) Equations 4(3).2, 4(3).3, 4(3).4, 4(3).6, 4(3).7, 4(3).8 and inline equations cardinality notation changed	|.|
	||.||for magnitude. |.|for cardinality

(KS) Section 4.6 Typo	described is here
	described here

1.10 Swarm Type

(PJ) Typo in introduction	is a swarm
	in a swarm

(PJ) Parameter explanation, Table 5.1 → 4.1	Explain parameter requirements
	Paragraph added

(NE) Table labels in 5.1 → 4.1	Neighbour and agent altered
	Cohesion field, Repulsion field

(PJ) Section 5.2.1 → 4.2.1	Clarify graph mean
	Paragraph extended

(PJ) Section 5.3.1 → 4.3.1	Clarify bi-modal
	Paragraph extended

(PJ) Section 5.4 → 4.4 Comment	Isn't Sect 5.4 a repetition
	Section is a comparison to highlight that the new metric could be used as a replacement for the distance metric and provide additional status information

(PJ) Section 5.4 → 4.4 Punctuation	metric Figure 5.21
	metric. Figure 5.21

(PJ) Section 5.5 → 4.5 Expand	identical?
	descrition extended

1.11 Perimeter Coordination

(PJ) Typo in introduction	applied. Partial
	applied, partial

(PJ) Fig 6(5).4 6(5).28, 6(5).29	Needs to indicate starting point
	Added "Start Point" and arrows to graphs
(PJ) Section 6(5).2 Typo	there
	their
(ks) Section 6(5).7.1.1 Typo	problem can is
	problem is
(KS) Section 6(5).7.2 Typo	algorithms selection
	algorithm's selection
(PJ) Section 6(5).8 Typo	must are
	are
(PJ) Section 6(5).8 Typo	its a goal
	towards it's goal
(KS) Section 6(5).8.1 Typo	algorithm is produces
	algorithm produces
(KS) Section 6(5).8.1 Sequence of refs	6.23, 6.25, 6.24 and 6.26
	6.23, 6.24, 6.25 and 6.26
(KS) Section 6(5).8.3 Typo	(Figure 6.30)
	Figure 6(5).30
(PJ) Figure 6(5).31 Title change	speed
	path
(PJ) Section 6(5).9 Reference	tables above
	Tables 6.8, 6.9 and 6.10
(PJ) Figure 6(5).42 Font	n_{1-7}
	Font increased
(PJ) Missing Section	Conclusion section missing
	Added conclusion

1.12   Concave Reduction

(PJ) Introduction sentence duplicates explanation	Depending upon ....
	Sentence removed
(PJ) Expand explanation	In some circumstances ...
	Circumstance explained

(PJ) Table Reference	Table 8.4 ...
	Table 7.1 (Error in latex label corrected)
(PJ) Figure title clarification Fig 7(6).12, 7(6).13	Baseline/Concave path effect
	Baseline/Concave path effect (after 600 iterations / 60s)
(PJ) Figure title clarification Fig 7(6).16, 7(6).18, 7(6).19	(80/60)
	(cohesion field 80 / repulsion field 60)
(PJ) Table 7.3 Location	Located below Figure 7(6).19
	Moved to below 7(6).16 and referenced.
(PJ) Page 143? Figure reference 7.32	Incorrect latex reference
	Corrected
(PJ) Typo section 7(6).4	seem
	seen
(PJ) Figure title clarification 7(6).38, 7(6).39	60 Obstacle
	repulsion field 60 units for obstacle

1.13 Flood Filling

(PJ) Section 8.1.1 Typo	rseultant
	resultant
(PJ) Section 8.1.2 Typo	space. each
	space. Each
(PJ) Section 8.1.2 Typo	seconds. between
	seconds. Between
(PJ) Section 8.1.2 Typo	feild
	field
(PJ) Section 8.1.3 Sentence restructure	uses a swarm that utilises
	uses both
(PJ) Section 8.2 Typo	thier
	their

(PJ) Section 8.2.1 Typo	stabalises
	stabilises
(PJ) Section 8.2.1 Typo	distrurbances
	disturbances

1.14   Future Work