



OPERATIONS MANUAL

Version: 20170518

Disclaimer

The information contained in this operations manual is presented in good faith with the intention of:

- (a) promoting safety in the sports of hang gliding, paragliding and weightshift microlighting;
- (b) providing a clear understanding of the responsibilities and privileges of participants in these sports; and
- (c) providing a framework upon which these sports can be administered and allowed to grow in harmony with other airspace users.

As far as possible, this manual represents the best information available at the time of publication.

1	Introduction	6
1.1	The Hang Gliding Federation of Australia Incorporated (HGFA)	6
1.1.1	HGFA Operations Manual	6
1.1.2	HGFA Publications	7
1.2	Civil Aviation Safety Authority (CASA)	7
1.2.1	The Civil Aviation Orders (CAO's)	8
1.2.2	Abbreviations	8
1.2.3	Definitions	9
1.3	Operational Documents Register	12
2	Organisation and Administration	16
2.1	The Hang Gliding Federation of Australia	16
2.2	The Role of State and Regional Associations	16
2.2.1	The Role of Affiliated Clubs	16
2.3	Membership of the HGFA	17
2.3.1	Full Membership	18
2.3.2	Life Membership	18
2.3.3	Trainee Membership	19
2.3.4	Introductory Trainee Membership	20
2.3.5	Visiting Pilot Membership	20
2.3.6	Associate or Affiliate Membership	21
2.4	Suspension or Cancellation of Pilot Certificates	21
2.4.1	Expiry of Membership and Certificates	21
2.4.2	Contravention of Rules, Discipline of Members	21
2.5	The Organisation of the HGFA	23
2.5.1	HGFA Executive Officers	23
2.5.2	Committees	24
2.5.3	CIVL Delegate	25
3	Responsibility of Pilots, Clubs, Duty Pilots and Safety Officers.	26
3.1	Responsibilities	26
3.1.1	Pilots	26
3.1.2	HGFA State and Regional Associations and Affiliated Clubs	27
3.1.3	Duty Pilots	27
3.1.4	Safety Officers	28
3.1.5	Senior Safety Officers	28
3.2	Accident and Incident Reporting	28
3.2.1	Definition of Accident & Incident	29
3.2.2	Notification of Accidents	29
3.2.3	Notification of Incidents	29
3.2.4	Where a Fatality has Occurred	30
3.2.5	Reporting via the HGFA Accident / Incident Report System (AIRS)	30
4	Control of Operations	31
4.1	General Requirements	31
4.1.1	Aircraft Maintenance and Pre-Flight Inspections	31
4.1.2	Helmets	31
4.1.3	Pilot in Command	31
4.1.4	Health Standard, General	32
4.1.5	Health Standard, Specific to Instructional Operations	32
4.1.6	Failure to Meet Health Standard	32
4.1.7	Alcohol and Drugs	32
4.1.8	Provision of Pilot Instruction	32

4.1.9	Carriage of Passengers	33
4.1.10	VHF Radio Operator Endorsement	33
4.1.11	Cross Country Operations (HG/PG/PPG/WM)	33
4.1.12	Air Displays (HG/PG/PPG/WM)	33
4.1.13	Parachute Descents	33
4.2	Sites	34
4.2.1	Land Owner Rights and Pilot Responsibilities	34
4.2.2	Operations within Vicinity of a Non-Controlled Aerodrome.	34
4.2.3	Hang Gliding and Paragliding Sites	34
4.2.4	Weightshift Microlight Operations	35
4.2.5	Identification of Powered Paragliders & Powered Hang Gliders.	40
4.2.6	Powered Paragliders/Parachutes over 70 KG (Empty Weight)	40
5	HGFA Flight Rules.....	41
5.1	General.....	41
5.1.1	Acrobatic Flight	41
5.1.2	Dropping of Articles.....	41
5.1.3	Flying over Public Gatherings	41
5.1.4	Low Flying (Under CAO 95.8).....	41
5.1.5	Negligent Operation	42
5.1.6	No-Fly Areas	43
5.1.7	Towing of Articles.....	43
5.1.8	Visual Flight Rules.....	43
5.1.9	>10,000 Feet Above Mean Sea Level.....	43
5.2	Rules of the Air.....	44
5.2.1	Take Off Rules	44
5.2.2	Give Way Rules.....	44
5.2.3	Operation in Proximity to other Aircraft	44
5.2.4	Collision Avoidance	44
5.2.5	Overtaking Rule	45
5.2.6	Landing Rule.....	45
5.3	Civil Aviation Safety Authority – Regulations	45
5.3.1	Civil Aviation Order 95.8.....	46
5.3.2	Civil Aviation Order 95.10.....	46
5.3.3	Civil Aviation Order 95.32.....	46
5.3.4	CAR 166 “Operations in the Vicinity of Non-Controlled Aerodromes” – All Aircraft	46
6	Pilot Certificates, Endorsements & Ratings.....	48
6.1	Requirements to be a HGFA Pilot	48
6.2	Issue and Renewal of Certificates - Summary	48
6.2.1	Hang Gliding.....	48
6.2.2	Paragliding.....	49
6.2.3	Weightshift Microlighting.....	49
6.2.4	Powered Paragliding.....	50
6.3	Pilot Certificates & Endorsements	51
6.3.1	Hang Glider Certificates.....	51
6.3.2	Hang Glider Pilot Endorsements.....	55
6.3.3	Paraglider Pilot Certificates	60
6.3.4	Paraglider Pilot Endorsements	65
6.3.5	Powered Paraglider Pilot Certificates	71
6.3.6	Powered Paraglider Pilot Endorsements	72
6.3.7	Weightshift Microlight	79
6.3.8	Weightshift Microlight Pilot Endorsements.....	81
6.4	Ratings	86

6.4.1	Safety Officers	86
6.4.2	Senior Safety Officers	87
6.4.3	Aircraft Inspector	88
6.4.4	AIRS Manager	89
7	Instructor Certificates	91
7.1	Types and Requirements	91
7.1.1	Flight Experience Instructor Certificate (HG/PG)	91
7.1.2	Flight Experience Instructor Certificate (WM/PPG)	93
7.1.3	Apprentice Instructor Certificate (HG/PG)	95
7.1.4	Apprentice Instructor Certificate (WM/PPG)	97
7.1.5	Flight Instructor Certificate (HG/PG)	99
7.1.6	Flight Instructor Certificate (WM/PPG)	101
7.1.7	Chief Flight Instructor Certificate (HG/PG)	103
7.1.8	Chief Flight Instructor Certificate (WM/PPG)	106
7.1.9	Instructor Examiner Certificate (HG/PG)	108
7.1.10	Instructor Examiner Certificate (WM/PPG)	109
7.2	Issue and Renewal of Instructor Certificates.....	111
7.2.1	Instructor Certificates (HG/PG)	111
7.2.2	Instructor Certificates (WM).....	112
7.2.3	Instructor Certificates – (PPG) (Foot / Wheel).....	113
7.3	Instructor Endorsements:.....	114
7.3.1	Tandem Endorsement (Instructional) - (HG/PG/PPG/WM)	114
8	Pilot Flight Training	115
8.1	Training	115
8.2	Training Facilities (HG/PG/PPG/WM)	116
8.2.1	Establishment of Flight Training Facilities	116
8.2.2	Training Facilities (WM).....	117
8.2.3	Facility Inspections (HG/PG/PPG).....	118
8.2.4	Facility Inspections (WM)	118
8.3	Flight Training Syllabus.....	119
8.3.1	Theory	119
8.3.2	Practical Flight Training	124
8.4	Endorsement Syllabus	130
8.4.1	Aerotow (HG)	130
8.4.2	Ground Tow (HG/PG)	131
8.4.3	Tugmaster Aerotow (WM)	132
8.4.4	Cross Country (WM/PPG).....	133
8.4.5	Formation Flying (PPG/WM)	134
8.4.6	Foot Launch Endorsement (PPG).....	134
8.4.7	Wheel Launch Endorsement (PPG).....	134
8.4.8	Free Flight (PPG).....	135
8.4.9	Powered Endorsement (Foot launched - HG/PG).....	136
8.4.10	Oxygen (HG/PG/PPG)	137
8.4.11	VHF Radio (HG/PG/PPG/WM)	138
8.4.12	Tandem (HG/PG)	139
8.4.13	Tandem (PPG) (Foot & Wheel Launched)	140
8.4.14	Tandem (WM)	141
8.4.15	Tandem – (Instructional) - (HG/PG/PPG/WM)	142
8.4.16	Speed Wing (PG).....	143
9	Aircraft & Equipment Standards.....	144
9.1	Certification Specifications and Standards:.....	144

9.2	Aircraft Design / Construction (Solo)	144
9.2.1	Minimum Standards for Hang Gliders and Paragliders (CAO 95.8).....	144
9.2.2	Standards for Weightshift Microlights & Powered Paragliders (CAOs 95.10, 95.32).....	144
9.3	Aircraft Design / Construction (Passenger)	144
9.4	Ancillary Equipment	145
9.5	Emergency Equipment	145
9.5.1	Standards for Helmets.....	145
9.5.2	Standards for Emergency Parachutes.....	145
9.5.3	Emergency Beacons	146
9.6	Assembly, Inspection and Maintenance Standards	146
9.6.1	Pre-flight Inspection Standards	146
9.6.2	Daily Inspection (HG/WM Wing)	146
9.6.3	Daily Inspection (WM Base Unit).....	147
9.6.4	Daily Inspection (PG/PPG Wing).....	148
9.6.5	Daily Inspection (PPG Motor / Wheeled Base Unit)	148
9.7	Maintenance	149
9.7.1	Hang Glider Maintenance Standards.....	149
9.7.2	Hang Glider Maintenance Schedule - Private Operations	150
9.7.3	Hang Glider Maintenance Schedule – Gliders used for training or Tandem Flights.....	151
9.7.4	Paraglider Maintenance Standards	153
9.7.5	Paraglider Maintenance Standards - Private Operations	154
9.7.6	Paraglider Maintenance Standards - Gliders used for training or Tandem Flights.....	155
9.7.7	Weightshift Microlight Maintenance Standards.....	156
9.7.8	Aircraft Log Book.....	162
9.7.9	Defects, Repairs and Modifications (HG/PG/PPG/WM)	162
NOTE: For any LSA, all repairs and modifications including who can conduct those repairs and modifications, must be approved by the LSA manufacturer. 162		
9.7.10	PPG/PPC Wheel Base Maintenance Standards (Engine Included)	163