



Model Aeronautical Association of Australia
53rd Australian Model Aircraft National Championships

"Shoalhaven City - Nats 2000

at
NOWRA, NSW.
26 April to 4 May, 2000.

Bulletin No. 3 - February, 2000.

Changes and Alterations to Events and other Information

Following are changes etc. to the previously circulated list of events and other event details for your information:

- Control Line:**
- * Junior Fun Rat Race is replaced by Junior Rat Race. This event will be run to MAAA Inc Rules as per the MAAA Rules Book with the exception that only plain-bearing motors running suction can be used.
 - * Junior Combat will be run to MAAA Inc Rules as per the MAAA Rules Book.
 - * Vintage "B" Class Team Race rules are published with this Bulletin.
 - * Vintage "A" Class Team Race rules have been published previously.
 - * Gordon Burford Vintage "A" Team Race rules have been amended to, "Vintage A Teamrace rules but a Gordon Burford diesel motor must be used. No schnurle-ported engines allowed. No glo engines converted to diesel allowed.
 - * Classic Aerobatics rules are published with this Bulletin.
 - * Slow Combat rules are published with this Bulletin.
 - * Four Control Line Aerobatic events incorrectly shown as Teams Events on some entry forms.

- Radio Control:**
- * Australian Thermal Glider rules in respect to the 12v winch battery limitations is allowed/adopted into the FAI F3B Glider event as requested and approved by the MAAA Inc Glider Sub-Committee.
 - * The Aerobatics Program is incorrect. Rounds of each class will be run each day – not a class on each day as shown in the program.
 - * All radios must be MAAA Inc. Bandwidth Tested and displaying the appropriate bandwidth stickers when presented for mandatory frequency checking on Registration/Processing day. Bandwidth testing will not be available at the Nats.

- Free Flight:**
- * The event list as published on the entry form was incorrect. Please make the following alterations prior to submitting your entry:
 - Event 6 and 10 are the same event, i.e. Gordon Burford Diesel Duration.
 - Alter event 10 to read "Indoor Mini Stick"
 - Event 26 is not programmed (6" H.L. Glider) and should be changed to read "No Cal Scale".
 - Event 28 – F1D Microfilm, was omitted and should be added to the event list on entry form.
 - * When submitting your entry form for Free Flight event please ensure your events are clearly defined.
 - * Whilst there are no junior free flight events, performances by Junior competitors in Free Flight events will be recognised.

WARNING: Please ensure adequate footwear and protective clothing is worn when participating in free-flight events as there is a danger from Black Snakes on the Free Flight field.

Event Co-ordinators

Radio Control:	Oldtimer	-	Basil Healy	02 4341 7292.	Pylon	-	Steve Ansell	02 4446 0643.
	Electric	-	Richard Solomon	02 4683 1426.	Scale	-	Laurie McCann	02 9797 6091.
	Glider	-	Bruce Robbins	02 4285 5432.	Aerobatics	-	Brian McFarlane	02 4284 6611.
	Helicopter	-	Richard Mailath	02 9958 0643.				

Free Flight:	Tahn Stowe	02 4754 1334.	Control Line:	Paul Turner	02 4777 4645.
	Peter Scott	02 9624 1262.		Guy Bevan	02 9979 9595.

Entry Forms:

- * Please note that payment of the \$30-00 Registration Fee is mandatory and is in addition to event entry fees.
- * When ordering Nats Polo Shirts your size must be included on the entry form.
- * Raffle tickets will be sent to you if payment is made on entry form. Additional books of tickets are available.
- * In Teams events each member of a team is required to pay the event entry fee and must be a Registered Nats Competitor.
- * Entries close 3rd March, 2000. A surcharge of \$50-00 will apply to late entries.
- * Accommodation information can be obtained from Shoalhaven Information Centre 02 4421 0778 – ask for Mrs. Beverly.
- * Nationals Committee:- Chairman Mr. Joe McGuffin 02 9825 4695. Secretary Mr. Dave Brown 02 6351 2513.

Rules for Control Line Slow Combat:

1. MOTORS: Not to exceed 0.15 cu.in. [2.5cc] and must be plain bearing. [No Taipan etc. ballrace accepted]. No engine modifications.
2. PROPELLERS: Diameter 7 or 8 inches. Pitch 4-6. Minor adjustments for balancing only. ie.Sports props.
3. FUEL: Glow fuel standard FAI mix. Diesel to have maximum 2%IPN or similar.
4. TANK: Standard wedge or square section tank to be used. No pressure bladders.
5. Maximum of two models per flying day and one model per bout.
6. All models must ROG al all Times. Failure to do this will incur a penalty of 100 points for each occasion
7. Any Competitor will be disqualified from the individual flying day if in the opinion of the CD they breach the intention of the rules or contest.
8. All the pre 1988 FAI combat rules will apply unless contradicted by the rules above.
9. Model must resemble an aeroplane.
10. The CD may direct a model to be slowed down.

Rules for Control Line Classic Aerobatics:

- * The model must be a pre 1965 design. Proof required (plan, magazine article)
- * Model must have an effective Muffler.
- * Flight time 7 minutes maximum.
- * Departure (within 1 min.), Take Off, Horizontal flight, Double wing over (reverse), Consecutive inside round loops (5), Inverted flight (2 laps), Consecutive outside round loops (5), Consecutive horizontal round eights (3, FAI), Consecutive Vertical eights (3, FAI), Consecutive overhead eights (3 FAI), Four Leaf Clover, Landing.

Corrected List of Events:

Free Flight Events

1. F1G Coupe D'Hiver
2. F1J Power
3. F1H A1 Glider
4. K.K.K. (CSA)
5. Vintage Power
6. Gordon Burford Diesel Duration
7. Vintage Glider
8. Hand Launch Glider
9. Scale
10. Indoor Mini Stick
11. Vintage Rubber
12. F1A Glider
13. Precision
14. F1B Wakefield
15. Open Power
16. F1C Power
17. Open Rubber
18. Day Scramble
19. Night Scramble
20. P30 Rubber
21. Peanut Scale
22. Indoor Open H.L. Glider
23. Indoor Hangar Rat
24. Indoor Hangar Rat Scramble
25. Indoor Open Rubber Scale
26. No Cal Scale
27. F1L Indoor EZB
28. F1D Indoor Microfilm

(t) = Teams Event.

Control Line Events

1. F2A Speed
2. Combined Speed
3. F2B Expert Aerobatics
4. F2B Advanced Aerobatics
5. Junior Aerobatics
6. Vintage Aerobatics
7. Classic Aerobatics
8. F2C Team Race (t)
9. Mini Goodyear (t)
10. Goodyear (t)
11. Bendix (t)
12. Junior Rat Race (t)
13. 2.5cc Rat Race (t)
14. ½A Team Race (t)
15. B Class Team Race (t)
16. Vintage A Class Team Race (t)
17. G.B. Vintage A Team Race (t)
18. Vintage B Class Team Race (t)
19. F2D Combat
20. Open Combat
21. 2.5cc Slow Combat
22. Junior Combat
23. F4B Scale
24. Stand-Off Scale

Radio Control Events

1. Oldtimer Texaco
2. Oldtimer Junior Texaco
3. Oldtimer ½A Texaco
4. Oldtimer Duration
5. Oldtimer Gordon Burford Event
6. Oldtimer 2cc Duration
7. Oldtimer Glider
8. Oldtimer Standard Duration
9. Oldtimer '38 Antique
10. Oldtimer Nostalgia
11. F3C Helicopter
12. Advanced Helicopter
13. Novice Helicopter
14. F4C Scale
15. Large Scale
16. Stand-Off Scale
17. F3A Aerobatics
18. Expert Aerobatics
19. Advanced Aerobatics
20. Sportsman Aerobatics
21. F3B Thermal Glider
22. F3J Thermal Glider
23. Thermal Glider
24. Junior Thermal Glider
25. Hand Launch Thermal Glider
26. F5B Electric Glider
27. F5B Ten Cell Electric Glider
28. Seven Cell Electric Glider
29. F3D Pylon Racing (t)
30. F5D Electric Pylon Racing (t)
31. ½A Pylon Racing (t)
32. QM Pylon Racing (t)
33. Golden Era Scale Pylon (t)
34. AT6 Texan Scale Pylon (t)

Program of Events:

The program of events as previously circulated with the entry form, published in Airborne Magazine and the Radio Control Model News, is still current as this date.

Vintage "B" Team Racing Rules.

4.3.9.3 Model Details.

The following section gives typical (but not exhaustive) guidelines for what may or may not be allowed.

(a) Entrants are encouraged to adhere as closely as possible to the original design to capture the flavour and authenticity of the period. A +/- 5% dimensional building tolerance is allowed. Any modifications which, in the opinion of the Contest Director, significantly change the appearance or performance of the model as originally designed will not be allowed.

(b) Structures may be strengthened for racing to current rules using materials and methods consistent with the period, i.e. solid balsa in place of sheeting or planking, silk or nylon in place of tissue on built up flying surfaces or stringered fuselages etc. In addition, open structures such as built up flying surfaces may be sheeted with thin balsa before covering.

(c) Models with split fuselage construction (e.g. Footprint) may be made in one piece, with a contemporary helmet cowl if the engine was originally attached to the top half of the fuselage or a drop in layout if it was originally fixed to the bottom half. Models designed with a built-in engine installation may be modified to a drop in layout.

(d) Leadouts positions and spacing must be as per plan (no grouping) and line connections must be external to the model unless shown as internal on the original plan.

(e) Engine access must be as per plan with no metal pans or drop in layouts except as noted in (c) above. Radial mounts can be replaced by engine bearers. The cowl/engine position can be adjusted to suit different engine dimensions and weights.

(f) Wheels must not be behind a vertical line through the plan position, with track likewise conforming to the plan dimensions. A spreader bar may be fitted if desired.

(g) Elevators must be as per plan (no single elevator instead of a double).

(h) The use of carbon and kevlar is not allowed.

(i) Glowplug activation systems shall be limited to commercial clips, two-pin plugs or jackplugs. Any other system must be shown on the plan or have acceptable proof of use in the period.

(j) Models may be flown with the spinners removed but, if so, a domed safety nut must be fitted.

(k) A shut-off can be fitted but only for emergency use and not for the purpose of a normal pit stop.

(l) Entrants are encouraged to find additional models with acceptable proof of eligibility.

4.3.9.4 Eligibility of Engines.

(a) The maximum engine size is 5cc or .29 cu inches.

(b) A Vintage engine is one whose design and mark number was advertised for sale prior to 1st January, 1959, although the engine need not necessarily have been manufactured by that date.

(c) The engine used in a model in the Vintage B Team Racing shall either conform to the above or, if of later design and manufacture, be a plain bearing, non-schnuerle ported engine, commercially advertised at some time.

(d) The use of ETA 6Cs will be permitted as they are direct lineal descendants of earlier, scarce, engines and offer no marked increase in performance.

(e) Any engine modifications, replacement parts or hybrid engines must use materials and technology clearly in use for model aircraft engines used in Class B team racing prior to 1st January, 1958; e.g. a loop scavenged engine will have a baffle piston. Although available at the time, peripheral jet carburetors will be allowed. Note – A hybrid engine must have the crankcase of an engine as defined in (a), (b), (c) or (d) above.

4.3.9.5 Propellers.

Propellers shall not be of the glass, carbon, kevlar or other resin bonded types.

4.3.9.6 Tanks.

(a) Tank capacity, including fuel lines shall be 30cm³ for Class B.

(b) There shall be no use of such modern features as multi-function valves and pressure refuelling.

Refuelling shall be by squash bottle only.

4.3.9.7 Lines.

(a) The control lines shall be measured from the centre of the handle grip to the centre of the model. They shall conform to current safety regulations for Team Racing and each ready to fly system of handle/lines/model shall be subject to a pull test of twenty (20) times the model weight for Class B.

(b) For Class B, the line length shall be 17.06 metres (56'0") with a minimum line diameter for solid lines of 0.345 mm (0.0136") and for multi-strand lines of 0.38 mm (0.015").

4.3.9.8 Distances.

Heats:	Class B - 75 laps.
Finals:	Class B - 150 laps.

4.3.9.9 The Circle.

(a) The radius of the pilots' circle shall be three (3) metres for Class B. The radius of the flight circle shall be 20.56 metres (67'6") for Class B.

(b) The circle shall be divided into six (6) equal segments for the locations of the starting positions, choice of which shall be by means of a draw.

4.3.9.10 Race Conduct.

The conduct of the race shall be in accordance with the rules laid down for the conduct of "A Class" Team Racing events in the current edition of the MAAA Inc. Contest Rules Book. In the interests of safety, the Contest Director may, at his discretion, group models/teams according to their performance/competence.

4.3.9.11 Scrutineering.

Scrutineering will be carried out at the discretion of the Contest Director and may include model/engine, tank capacity and lines. The onus of proof lies with the entrant for any model/engine feature not listed and the entrant must have acceptable provenance on the day of the contest.

4.3.9.12 Proof of Authenticity.

(a) A Vintage B Team Racing Model must be built to a constructionally detailed and dimensioned plan or three-view published or kitted prior to 1st January, 1958. January 1958 magazines are accepted as published in 1957. The model must comply with the accepted team racing rules at the time of publication. Exceptions to this rule may be permitted as follows:

(b) Where only photographic evidence of a design was published before 1st January, 1958, but the original designer/s can confirm accurate details of the model by signing the plan.

SUPPLEMENTARY REGULATION:

The Technical Committee has the right to protect the class for the majority of its competitors and for the good of the class as they see fit.

1. The competitor must use an engine modified in Australia and be able to prove it to the satisfaction of the Technical Committee if required. Failure to do so will draw a DQ. The exception to this rule is engines modified before the cut-off date of 1st January, 1959.



MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA
53rd AUSTRALIAN MODEL AIRCRAFT NATIONAL CHAMPIONSHIPS
Shoalhaven City - Nats 2000
 26 April to 4 May, 2000.

ENTRY FORM

Radio Control Events			Tick Event	Frequency	Free Flight Events			Tick Event	Control Line Events			Tick Event
1	Oldtimer Texaco				1	F1G Coupe D'Hiver			1	F2A Speed		
2	Oldtimer Junior Texaco				2	F1J Power			2	Combined Speed		
3	Oldtimer 1/2A Texaco				3	F1H A1 Glider			3	F2B Expert Aerobatics		
4	Oldtimer Duration				4	K.K.K. (CSA)			4	F2B Advanced Aerobatics		
5	Oldtimer G.B. Event				5	Vintage Power			5	Junior Aerobatics		
6	Oldtimer 2cc Duration				6	GB Diesel Duration			6	Vintage Aerobatics		
7	Oldtimer Glider				7	Vintage Glider			7	Classic Aerobatics		
8	Oldtimer Standard Duration				8	Hand Launch Glider			8	F2C Team Race	Team	
9	Oldtimer '38 Antique				9	Scale			9	Mini Goodyear	Team	
10	Oldtimer Nostalgia				10	Indoor Mini Stick			10	Goodyear	Team	
11	F3C Helicopter				11	Vintage Rubber			11	Bendix	Team	
12	Advanced Helicopter				12	F1A Glider			12	Junior Rat Race	Team	
13	Novice Helicopter				13	Precision			13	2.5cc Rat Ract	Team	
14	F4C Scale				14	F1B Wakefield			14	1/2A Team Race	Team	
15	Large Scale				15	Open Power			15	B Class Team Race	Team	
16	Stand-Off Scale				16	F1C Power			16	Vintage A Class Team Race	Team	
17	F3A Aerobatics				17	Open Rubber			17	GB Vintage A Class Team Race	Team	
18	Expert Aerobatics				18	Day Scramble			18	Vintage B Class Team Race	Team	
19	Advanced Aerobatics				19	Night Scramble			19	F2D Combat		
20	Sportsman Aerobatics				20	P30 Rubber			20	Open Combat		
21	F3B Thermal Glider				21	Peanut Scale			21	2.5cc Slow Combat		
22	F3J Thermal Glider				22	Indoor Open H.L. Glider			22	Junior Combat		
23	Thermal Glider				23	Indoor Hangar Rat			23	F4B Scale		
24	Junior Thermal Glider				24	Indoor Hangar Rat Scramble			24	Stand-Off Scale		
25	Hand Launch Glider				25	Indoor Open Rubber Scale						
26	F5B Electric Glider				26	No Cal Scale						
27	F5B Ten Cell Electric Glider				27	F1L Indoor EZB						
28	Seven Cell Electric Glider				28	F1D Indoor Microfilm						
29	F3D Pylon Racing	Team										
30	F5D Electric Pylon Racing	Team										
31	1/2A Pylon Racing	Team										
32	QM Pylon Racing	Team										
33	Golden Era Scale Pylon	Team										
34	AT6 Texan Racing Scale Pylon	Team										

**Tick events you are entering.
 Show Transmitter Frequency.
 Payment by cheque or money
 order payable to:
 Shoalhaven City - Nats 2000**

**ENTRIES CLOSE
 3rd MARCH, 2000.**
**LATE ENTRY
 SURCHARGE \$50**
 Post Entries To:
**SECRETARY - NATS 2000,
 52 OUTER CRESCENT,
 LITHGOW. NSW. 2790.**

Raffle Prizes: JR XP42 Radio Super Tigre 2500 plus 3rd		Registration Fee: (Seniors and Juniors) \$ 30-00
Competitor's Name: _____	Competitor Event Fees: @ \$8 - Senior @ \$6 - Junior	
Address: _____	Team Event Fees: @ \$8 (Seniors and Juniors)	
PostCode: _____	53rd Nats Polo Shirts: @ \$30 Size: _____	
Telephone: _____	53rd Nats Badge: @ \$5 (1 in goodies bag)	
MAAA No: _____	Special Numbered Nats Badge: @ \$10 (300 only - 1 per competitor)	
Date of Birth (if Junior): _____	53rd Nats Patches: @ \$5 (1 in goodies bag)	
Nominate your Team Member/s:	53rd Nats Stickers: @ \$1 (1 in goodies bag)	
(1) _____	Book of Raffle Tickets: @ \$5 (Book 6 Tickets @ \$1each)	
(2) _____	Nats Dinner Tickets: @ \$26 @ \$15 (Child under 13)	
(3) _____	Farewell BBQ Tickets: @ \$8	

Goodies Bag includes Program and Delta Dart. Dinner is a three course formal dinner honouring Gordon Burford.

NOTE: *In Team Events each member of a Team is required to pay the event entry fee and must be a Registered Nationals Competitor.*

TOTAL AMOUNT PAID: (including \$30 Registration Fee) \$ _____

Cheque No: _____ Bank: _____ Branch: _____

COMPETITOR AGREEMENT: I agree to abide by all rules laid down by the Association and as stated in the Official or Special Rules as designated. I agree to compete in a sportsman-like manner and will make myself available to assist with the running of the National Championships. _____
 Signature of Competitor.



SHOALHAVEN CITY NATS 2000 - PROGRAM - 26 APRIL to 4 MAY, 2000.

Date	Activities	RADIO FLYING FIELDS				FREE FLIGHT FIELDS		CONTROL LINE FIELDS		
26 April Wednesday	Registration & Processing Nowra Racecourse 9am-5pm Official Opening Nowra School of Arts	Jervis Bay Airstrip	Nowra Racecourse	Manildra Farm Bolong Road	Bernie Reagan Sports Complex North Nowra	Jaspers Bush Airstrip	Bomaderry High School Hall	Rugby Club Field	Nowra Greyhound Track	Jervis Bay Airstrip
27 April Thursday		QM Pylon Racing	Sports Aerobatics	F3B Thermal Glider	Gordon Burford Oldtimer and 2cc O/T Duration	F1G Rubber and F1J Power	Indoor Free Flight Hangar Rat Hangar Rat Scramble	F2B Expert Aerobatics Round 1 and Junior Aerobatics	Junior Fun Rat Race	
28 April Friday		F3D Pylon Racing	Advanced Aerobatics	F3B Thermal Glider	½A Texaco and Oldtimer Nostalgia	F1H Glider and Kiel Kraft Kit (C.S.A)	Free Flight Indoor H/L Glider No Cal Scale	F2B Advanced Aerobatics Round 1		FAI Teamrace and ½A Teamrace
29 April Saturday	Scale Static Judging R/C C/L F/F Nowra Racecourse from 9am Night Scramble 7pm	F3D Pylon Racing	Expert Aerobatics	Thermal Glider and R/C Hand Launch Glider F/F Night Scramble	Oldtimer Duration	Vintage Power, Vintage Glider and Hand Launch Glider		F2B Expert Aerobatics Round 2 and Junior Combat	Vintage A Teamrace and Gordon Burford Teamrace	
30 April Sunday	Nationals Dinner honouring Gordon Burford	½A Pylon Racing and F5D Electric Pylon Racing	F3A Aerobatics	Thermal Glider and R/C Hand Launch Glider	Oldtimer Texaco	G.B. Event, Scale Diesel Duration and Vintage Rubber		F2B Advanced Aerobatics Round 2 and FAI Combat		F4B Scale and Stand-Off Scale
1 May Monday	Buy, Sell and Swap Night Nowra School of Arts	Novice Helicopter	Stand-Off Scale		Oldtimer '38 Antique and Standard Duration	F1A Glider and Precision		F2B Expert Aerobatics Round 3 and Junior Aerobatics		F2A Speed and All other Speed Classes
2 May Tuesday		Advanced Helicopter	F4C Scale	F3J Thermal Glider	Oldtimer R/C Glider	F1B Wakefield and Open Power	Indoor Free Flight Peanut Scale Open Scale	F2B Advanced Aerobatics Round 3 and Open Combat	Vintage B Teamrace and Bendix Racing	
3 May Wednesday		F3C Helicopter	Large Scale	F3J Thermal Glider	F5B Electric Glider (10 Cell and Open) and 7 Cell Electric Glider	F1C Power and Open Rubber	Indoor Free Flight F1D and F1L Mini-Stick	Classic Aerobatics and 2.5cc Slow Combat		2.5cc Rat Race and B Class Teamrace
4 May Thursday	Farewell BBQ at Racecourse 6-30pm	AT6 Pylon Racing and Golden Era Pylon Racing			F5B Electric Glider (10 Cell and Open) and 7 Cell Electric Glider	P30 Rubber and Day Scramble		Vintage Aerobatics		Goodyear and Mini Goodyear

For any further information contact: Nats Secretary - Mr. Dave Brown, 52 Outer Crescent, Lithgow. NSW. 2790. Telephone (02) 6351-2513 or Email daveb@ix.net.au