

BRITISH MODEL FLYING ASSOCIATION
CONTROL LINE TECHNICAL COMMITTEE
CONFIRMED MINUTES

of the 66th meeting (wef 02/12/00) held on
Saturday, 2nd December 2017
at BMFA Buckminster, Sewstern, NG33 5RW

Chris Barker was the person delegated by the BMFA Chairman to call this first meeting and is empowered to Chair the meeting until a new Chairman is elected.

Present: Vernon Hunt (Council Rep & Member); Chris Barker (Member & TR Rep); Paul Eisner (SpeedCom); Tony Goodger (Nostalgic Speed and SAM 35 Rep); Andy Housden (Carrier Deck Rep); Tony Cookson (CFA); Kevin Morgan (CLAPA) and Mervyn Jones (Member & F2B Rep)..

**(66)1 Election of Officers, Co-Options and Acceptance of Specialist Bodies
Representatives**

Action

(66)1.1 Establish the voting strength of the Meeting

The voting strength was established as three (CB, VH, MJ).

(66)1.2 Election of Chairman (1)

Chris Barker proposed Vernon Hunt. This was seconded by Mervyn Jones and carried unanimously.

(66)1.3 Co-Options, as and if required, to bring the number of full members to a maximum of six.

Mick Lewis, Paul Eisner and Tony Cookson were proposed by Chris Barker and seconded by Vernon Hunt. It was carried unanimously.

(66)1.4 Re-establish the voting strength of the meeting

The voting strength was established as 6.

(66)1.5 Election of Chairman (2)

Completed at Item (66)1.2

(66)1.6 Election of Secretary

Vernon Hunt proposed Chris Barker. This was seconded by Mervyn Jones and was carried unanimously.

(66)1.7 Election of Treasurer

Tony Goodger proposed Mick Lewis. This was second by Mervyn Jones and carried unanimously. Mick Lewis has stated that this would be his last year.

(66)1.8 Election of Council Delegate

Chris Barker proposed Vernon Hunt. This was seconded by Tony Goodger and carried unanimously. Vernon Hunt commented that he would need some help from Committee Members with attending Council meetings.

(66)1.9 Acceptance of Voting Recognised Specialist Body Representatives

Kevin Morgan	CLAPA
Tony Cookson	CFA
Paul Eisner	SpeedCom
Tony Goodger	SAM 35 and Nostalgic Speed
John Mealing	VTRSIG

The committee also noted that Andy Housden representing the Carrier Deck discipline has a standing invitation to attend the CLTC meetings in a non-voting capacity and graciously declined to claim any travelling expenses. It was noted that if committee members had two positions they could only exercise one vote.

(66)1.10 Establish the final voting strength of the Meeting

The final voting strength was established as 7.

(66)1.11 Election of Chairman (3)

Completed at item (66)1.2

(66)1.12 Election of Secretary, Treasurer & Council Delegate

Completed at items (66)1.6, (66)1.7 and (66)1.8.

(66)1.13 Election of PRO

None. PRO duties are undertaken by individual members of the committee in conjunction with the Specialist Body Representatives for their own disciplines.

(66)1.14 Election of Safety Officer

None. Safety is the responsibility of each member of this Committee, of the Control Line Specialist bodies and of each Control Line flier and is monitored as a matter of course.

(66)1.15 Election of Rules Officer

Chris Barker was proposed by Vernon Hunt, seconded by Tony Goodger and was unanimously elected as Rules Officer.

(66)1.16 Appointment of the Committee Results Officer

Chris Barker was proposed by Vernon Hunt, seconded by Tony Goodger and was unanimously elected.

(66)1.17 Decision on who will be budget signatory, if not the Treasurer, for the Team Travel Fund

The Committee unanimously agreed that Mick Lewis, Treasurer, should continue to be the Team Travel Fund budget signatory.

(66)2 Apologies for Absence

Apologies for absence were received from Mick Lewis.

(66)3 Minutes of Previous Meeting

These were accepted.

(66)4 Matters Arising (and not already on the Agenda)

(66)4.1 As of today, no response had been received from the steering group re: provision of hard circles, Jo and Peter Halman are to put a presentation together asking for contributions towards hard C/L circles (2) with safety fences, approximate cost £25/35K each. It was felt by the committee that these requests would be better coming from those representing individual disciplines. Members were asked to compile a list of prospective donors. The BMFA would match any monies donated but if the circle/s did not go ahead, any monies donated would be returned.

VH

CB

(66)4.2 All the rule changes (65)6 have been completed except (65)6.3.3.

CB

(66)4.3 Dave Brewin had been accepted as F2A reserve (65)9.1.

VH

(66)4.4 The World Cup in Lugo is still awaiting confirmation (65)11.

CB

(66)4.5 Errors need to be corrected (65)13.

(66)5 Miscellaneous Appointments

CB

(66)5.1 BMFA domestic judges list update to be completed by Chris Barker.

(66)6 Confirmation of Disciplines covered by this Committee & Invitations to Specialist Bodies

(66)6.1 The disciplines of Speed, Nostalgic Speed, Aerobatics, Team Race, Vintage Team Race, Combat and Carrier Deck were accepted. It was noted that Nostalgic Speed is included in the remit of the SAM 35 representative, Tony Goodger.

(66)7 Council Agenda (Proposals to, or review of, the Council Meeting of next January)

Not yet published. Any items relating to CL will be discussed by email if appropriate.

ALL

(66)8 Nationals De-briefing and Pre-planning

(66)8.1 The 2017 Nationals De-briefing was carried out at the CLTC meeting in October.

(66)8.2 The full 2018 Nationals Pre-planning meeting will be held in February 2018 but in the meantime the committee needs to look for CD's and judges, etc. It was agreed to have medals again for the Nationals awards so Peter Halman needs to know the list by January to facilitate ordering. It was suggested that the ribbon colours be changed for next year.

ALL

CB

(66)9 Teams

(66)9.1 Teams for the next World or European Championships. The teams for the 2018 World Championships in Landres, France were unanimously agreed as follows:

F2A Peter Halman, 50198
Ken Morrissey, 2525
Paul Eisner, 57093
Reserve: Dave Brewin, 58722

F2B M Williams, 114756
B Robinson, 68248
G Alison, 58277
Reserve: Roy Cherry, 63577

F2C Derek Heaton, 50550 & John Broadhead, 37494
Chris Barker, 51784 & Neil Tricker 124483
Mike Fitzgerald, 33566 & Mark Greenwood
Reserve: Malcolm Ross 50551 & Tony Toogood 40188

F2D Graham Ives, 88421
Mike Whillance, 88347
Gordon Price, SAA03304
Reserve: Andrew Shields, SAA06203
Pitman 1 Dave Riley 89913
Pitman 2 Harry Walker 143696

(66)10 Dates for Trials for World or European Championships teams.

Team selection takes place at designated competitions throughout the year as published in the BMFA Contest Calendar.

(66)11 Team Manager and Assistant Team Manager

When all applications for these posts at the C/L World Championships in France have been received (closing date 15.12.17), team members will be asked to vote for their preferred candidates. The results will be adjudicated on by Barbara Goodger and the results passed to Chris Barker to notify successful candidates. It was noted that due to the limited accommodation in the Landres area, Val James had already booked 15 hotel rooms.

(66)12 Competition Details

(66)12.1 Single Event Entry Fees - No change.

(66)12.2 Season Tickets - Control line does not issue season tickets.

(66)12.3 Provisional Nationals Entry Fees - This will be dealt with at the next CLTC meeting in February.

(66)12.4 Team Selection Events Entry Fees - It was agreed that this would be £20.00 for each discipline.

(66)12.5 Certificate requirements for the coming year to BMFA office or the Records Officer as soon as possible

(66)13 Technical Committee Annual Return

Chris Barker agreed to complete this and forward it to the BMFA Office.

CB

(66)14 Safety Review

It was reported that the CFA now have a defibrillator and there is also one at Buckminster. The BMFA are planning to run first aid training courses (2 days) at Buckminster and participants will get a qualification. It was agreed that information should be available at flying sites for the best route to the nearest A&E hospital or day centre with opening times if applicable. Chris Barker agreed to obtain a 'crash map' of Barkston Heath which has a grid to obtain a location on the airfield.

TC

CB

(66)15 Central Team Travel Fund

This item was deferred to the next meeting in February.

(66)16 CL Contest Calendar

Details of contests for 2018 should be forwarded to Chris Barker ASAP who will enter them on the BMFA website.

ALL

(66)17 Treasurer's Report

As Mick Lewis was absent, this item was deferred until the next meeting in February.

ML

(66)18 Any Other Business

AH/CB

(66)18.1 Andy Housden presented a document outlining Carrier Deck rule changes (attached). He explained that these were really just to tidy up the existing rules.

(66)18.2 It was noted that a season pass for flying at Buckminster would be £70.

(66)18.3 Barkston Heath has been confirmed as the venue for both the Free Flight and Power Nationals

(66)18.4 Good progress was being made at Buckminster. Hard centres are required for F2B and F2D. Consideration was being given to concrete circles obtainable from garden centres or gravel filled honeycomb. It was noted that the centres may have to be moved from the current location if hard circles are built or an alternative location be considered.

(66)19 Date and Venue of the next meeting

All

The next meeting of the Committee is scheduled for Saturday 17 February 2018.

The chairman closed the meeting at 13.30.

Signed:



Chairman

Dated: 17 Feb 18

Distribution of Corrected & Adopted Minutes:

Already Distributed: All Committee Members
Representatives of SpeedCom, CFA, Carrier

Requires Distribution: Mr D Varallo, Technical Secretary
Mrs Linda Harding, BMFA Office Manager
Other distribution as necessary

4.9 CARRIER DECK

4.9.1 CLASS 1 CARRIER DECK

4.9.1.1 The Flight Deck

The specifications of the flight deck should be as close to those of the deck constructed by the Royal Navy as possible except that when no deck is available for the event, weighted drags and arrester wires on any flat surface may be used.

4.9.1.2 Model Specific

Maximum single engine displacement will be up to and including 0.4028 cu. in. A twin-engined model may use individual engines each of maximum displacement 0.21 cu. in. The model must take off and land on an undercarriage of fixed or retractable type; in the latter case, the wheels must be extended for landing. Models must be equipped with an arrester hook which will have a maximum extended length of less than 1/3 of the model's overall length. Models must fly in an anti-clockwise direction. No method may be used to assist take-off other than the thrust developed by the in-flight power unit.

4.9.1.3 Lines

Stranded cable of minimum diameter ~~0.0436~~ **20** inch (e.g. ~~light~~ Laystrate) will be used for two line systems ~~for engines up to 0.40 cu in (6.55 cm³)~~. Stranded cable of minimum diameter ~~0.0185~~ **5** inch (e.g. ~~heavy~~ **light** Laystrate) will be used for ~~two~~ **three** line systems ~~for engines from 0.40 to 0.60 cu in (10 cm³)~~. Additional lines may be of any diameter. The lines shall be 60 ft (plus 6", minus 0") from the grip **inboard face** of the grip of the control handle to the **longitudinal** centre line of the model **fuselage**. Model, lines and handle shall withstand a pull test of 20 ~~times the weight of the model~~ **kg sustained for ten seconds. All handles must be fitted with a safety wrist strap which must be used by the pilot during all contest and practice flying.**

4.9.1.4 Official Flights

Three minutes will be allowed from the competitor beginning to start his engine, for the model to become airborne. Exceeding this time allowance will cause an attempt to be recorded. A further two minutes is allowed for each additional engine of a multi-engined model. An attempt will also be recorded where the model has been released for a take-off. Three attempts will be allowed for the two official flights, the highest scoring flight to count for the purposes of determining the competitor's placing **(subject to a CD's decision to extend the contest on the day)**. A flight is considered official when the competitor signals for a timed, low speed run. In the case of an uncompleted flight programme, points will be scored for the parts carried out, and also for the scale. All ground other than the deck shall be considered water, and touching the ground will terminate the flight.

In the final classification those competitors who have scored landing points under rule 4.9.1.7 will be placed ahead of any competitor who has failed to score landing points regardless of total scores.

4.9.1.5 Flight Procedure

The model shall not exceed an altitude of 20 ft. for more than half a lap during the timed run. No whipping is allowed at any time. High speed flight will be the first seven laps of the flight timed from a standing start. Low speed flight will be the next seven laps after the competitor signals the start of his low speed run by a pre-arranged signal, and this will be timed from ~~passing over the stern of the carrier~~ **the standing start position**. The flyer will not walk a circle of larger than 3 ft. radius during this phase of the flight, **nor must the model exceeds a 60 degree nose-high attitude except for momentary inadvertent deviations**. When the 60 degree limit is exceeded, the flyer will be notified immediately and must correct model attitude immediately. Failure to do so will result in loss of low speed score. A maximum of three notifications will be given. The fourth notification shall result in loss of the low speed points.

4.9.1.6 Flight Scores

~~Speed points will be scored as four times the percentage of the speed made by the differential between low and high speed, as calculated by the following formula:~~

$$\frac{(H - L) \times 100 \times 4}{H} \quad \text{—Where H = high speed and L = low speed}$$

~~Example: High speed = 95 mph, low speed = 25 mph.~~

$$\frac{(95 - 25) \times 100 \times 4}{95} = 295 \text{ points}$$

(a) All speeds shall be recorded to the nearest 0.1mph.

(b) Recorded high speed in mph shall be the high speed score in points.

10 times the ratio of recorded high speed to recorded low speed, calculated to the nearest 0.1 of a point, shall be the low speed score (note that high speed divided by low speed is the same as low speed flight time divided by high speed flight time).

4.9.1.7 Landing

The competitor shall signal to the judges when he is ready to land. The landing takes place at the end of the next complete lap after signaling, any subsequent laps being penalised by the deduction of 5 landing points for each extra lap. ~~It is desirable that a centre marker be provided, approximately 18 inches square and not more than ½ inch thick, to assist the competitor in lining up for the landing.~~

Points will be scored as follows:

100 points for an arrested landing ending with the model at rest at the normal ground angle for the type of undercarriage used.

50 points for an arrested landing ending with the model at rest at any other angle, whilst still having both main wheels in contact with the deck.

25 points for a landing on the deck, ending with the model at rest in any position not fulfilling the requirements of (a) and (b) above.

4.9.1.8 Scale Bonus

A carrier aircraft of any nation shall score 100 scale bonus points. A carrier aircraft is defined as any full-size aircraft which has at any time been fitted with arrester equipment designed for deck landing.

4.9.1.9 Scale Scoring

For the purpose of this contest, scale bonus points shall only be awarded to a model with fuselage, air brakes and the outlines of wings, tailplane, elevators, flaps, fin and rudder to the same scale within a tolerance of plus or minus 5% in line or dimension. Undercarriages shall emerge from the model in the same place as the prototype but need not be to scale. It is not necessary for flaps to operate in the same manner as in the prototype. Engine and accessories may protrude from the contours of the model providing the clearance around the protruding part does not exceed 1/4 inch. Wing **and tailplane** dihedral **and/or anhedral** shall be plus or minus ~~4%~~ **3°**. If a clear canopy is not used, the cockpit or canopy area shall be defined with a contrasting colour or colour outline. Colour schemes and markings shall approximate to a scheme used on the prototype. Scale three view drawings must be submitted to qualify for bonus points. The drawings shall be from a source acceptable to the contest director. Any deviation from these definitions and tolerances will result in NO scale points being awarded.

4.9.2 BASIC CARRIER DECK

With thanks to the Three Kings Club

4.9.2.1 The Model

- (a) Any fixed wing model **of 450 sq.in. (29 dm²) wing area or less** which must have a stable wheeled undercarriage.
- (b) Any engine, throttled or un-throttled.
- (c) No tuned pipes, only effective standard silencers.
- (d) Any fixed line length of 60ft (18.3m) or less. Line length is measured from the inboard face of the grip of the control handle to the longitudinal centre line of the model fuselage.
- (e) No moveable surfaces except normal elevators for pitch control, no yaw variation methods such as line rakes and no fixed boundary layer control devices such as slots or slats.
- (f) The arrester hook to be no longer than one third of overall model length and to have no other function than to arrest the model on landing.
- (g) A spinner or safety spinner nut is compulsory.
- (h) All handles must be fitted with a safety wrist strap which must be used by the pilot during all contest and practice flying.
- (i) All models, ready to fly, shall be subject to a pull test of 15 times model weight kg sustained for ten seconds.
- (j) All models must be fitted with a visible heavyweight Laystrate (or equivalent) safety cable between the bellcrank pivot and the engine.
- (k) Any fixed wing model of 264 sq.in. (17 dm²) wing area or less with a profile fuselage, simple flat-plate sheet wing, 0.15 cu.in. maximum engine capacity and fixed line length of 42ft 0 in. is eligible for the sub-class of Junior Carrier Deck (JCD). Such models shall compete directly with Basic Carrier Deck models and are subject to all Basic Carrier Deck rules except the High Speed and Low Speed lap distances.

4.9.2.2. The Contest

- (a) A competitor is allowed a maximum of three attempts to make a maximum of two official flights. An official flight is recorded when the pilot signals the start of the slow flight; until that time, the flight is considered an attempt. Once two official flights have been recorded by a competitor they will be allowed no more attempts (subject to a CD's decision to extend the contest on the day).
- (b) An attempt begins as soon as you have begun to start your engine(s). You are allowed three minutes to start the engine (four minutes for multi-engine models).
- (c) The model is timed from a standing start on the deck (or ground if the deck is not used) for seven full laps (JCD: 10 laps) and the high speed time is recorded in seconds. The CD will signal when these laps have been counted completed.
- (d) For the low speed score, on the pilot's signal, the model is timed from a point above the carrier's stern the standing start position for a full seven laps (JCD: 10 laps) and the low speed score is recorded in seconds. The CD will signal when these laps have been counted completed.
- (e) Flying height is not to exceed 6m (20ft) throughout the whole attempt and you must not leave the 3m diameter pilot's circle during the flight. Whipping is not permitted during the fast run. Flight progress must always be forward and anticlockwise. Ground contact, except after

landing, is considered to be ditching and is not allowed. Any infringement of these requirements means disqualification from the attempt.

- (f) Model attitude should not exceed 450 300 to the horizontal. Except after the landing signal each exceeding of 450 300 for one second or less will incur a warning and three warnings will disqualify the flight. After the landing signal has been given, a single exceeding of 450 300, however momentary, will disqualify the flight without warning.
- (g) To assist in assessing the 450 300 angle a clearly visible line shall be painted (or adhesive tape may be used) on both sides of the fin such that the line is horizontal when the model is held at 450 300 nose up.
- (h) On the pilot's signal of readiness, the model is to land on the deck or the marked-out deck outline after the next approach. Each lap completed after this first approach will result in a five point deduction.
- (i) The quality of the landing will be assessed and points will be awarded as follows:
 - i) Arrested, when stationary the model has correct deck attitude for wheel arrangement.....100
 - ii) Arrested, when stationary the model does not conform to i) but has all main wheels on deck.....80
 - iii) Arrested, when stationary the model does not conform to i) or ii) but is still on deck.....60
 - iv) Not arrested, when stationary the model has correct deck attitude for wheel arrangement.....40
 - v) Not arrested, when stationary the model does not conform to iv) but is still on deck.....20
 - vi) Any part of the model makes ground contact, whether arrested or not.....0
- (j) Models judged to be of scale like appearance of a specific navy full size aircraft that which has made an arrested landing on an aircraft carrier at any time been fitted with arrester equipment designed for deck landing will be awarded 10 bonus points. Models painted in a navy-like colour scheme will be awarded 10 bonus points. If the model has both it will be awarded 20 points.
- (k) The Contest Director's decision on all matters is final.

4.9.2.3 The Results

- (a) The competitor's highest individual flight score counts.
- (b) An individual flight score is: Low Speed (in seconds) minus High Speed (in seconds), plus Landing Points, plus Appearance Points, minus Deductions.
- (c) All times will be recorded to the nearest one tenth of a second.

