



FLIGHT SIMULATION GROUP

TERMS OF REFERENCE AND CONSTITUTION

(Ratified by the Specialist Groups' Committee on 23 August 2005)

1 **Aim.** The Flight Simulation Group (FSG) of the Royal Aeronautical Society (RAeS) aims to serve as a focus both nationally and internationally on behalf of the Society for simulation matters related to aviation.

Principal Objectives. The FSG shall position itself to work impartially both nationally and internationally at the forefront of the development, progression and adoption of advances in research, development, design, specification, procurement, production, regulation, operation, maintenance and evaluation of simulation tools and devices related to the civil and military air and space environments and supporting activities.

Principal Outputs. The FSG shall facilitate informed discussion which seeks to study, publicise and encourage the development, regulation, evaluation and use of flight simulation, flight simulators, synthetic training devices, synthetic developmental tools, synthetic environments and associated technologies through conferences, seminars, working groups, lectures and papers whilst at least covering the costs of its activities and, wherever possible, contributing to the Society's running costs. It shall maintain a list of challenges facing the flight simulation community and seek actively by all appropriate means to facilitate their progression. Finally, it shall also serve the flight simulation industry and its workforce through a wide programme of activities that seek to educate, inform, inspire and promote flight simulation.

Principal Issues. The principal issues shall include research & development, requirement specifications, civil and military synthetic training systems and services, regulation and evaluation to international standards, engineering, maintenance, the simulated environment including air traffic management, all aspects of the underlying technologies, and related challenges confronting the flight simulation industry.

Membership. Membership shall be open to anyone in the aeronautical community sharing and supporting the FSG's aim. A membership database and mailing list shall be maintained, and membership shall be deemed to have lapsed when a member fails to respond to communication for more than 24 months.

Committee. The FSG Committee (FSGC) shall constitute the FSG executive and shall hold an Annual General Meeting (AGM), normally in June each year. The FSGC shall comprise a minimum of 12 and a maximum of 18 full members each of whom shall be a member of one of the grades of the Society and may vote on FSGC business. Up to six other members may be co-opted. The FSGC membership shall provide a Chairman and certain other office-holders. Full details are at Annex A.

Election. Nominations for the election of full FSGC members shall be proposed and seconded by registered members of the FSG, who are also members of the Society, and shall be submitted to the FSGC Chairman no later than ten working days before the AGM. All candidates for election should be present at the AGM and may be invited to speak. A secret ballot shall be held at the FSG AGM and only registered members of the FSG may vote. The ballot shall require that they list the names of their preferences up to a maximum of the number of vacancies. When returns are counted, in the event of a tie for the last place available, the Chairman shall use a casting vote.

Term of Membership. Full members shall serve for a maximum term of three years, and may be re-elected for up to two further consecutive three-year terms. Members who have completed nine consecutive years on the FSGC may not be re-elected until after two years' absence from the full Committee. A full member shall normally be required to stand for re-election in the event of non-attendance at three or more meetings in the preceding year.

Co-opted Members. Proposed and seconded nominations for co-option shall be submitted to the Chairman and considered at the next appropriate occasion, subject to there being a vacancy. Co-opted members shall have no voting powers and shall serve only until the next AGM. It is not essential that co-opted members be members of the Society.

Meetings. The FSGC shall meet in plenary session at least four times each year, and shall appoint sub-committees and working groups to make recommendations on the organisation of conferences, other events and special topic areas.

Quorum. A quorum shall be six full members, one of whom shall be the Chairman, Vice-Chairman or Chairman-Elect.

Chairman. The Chairman shall be elected by full members of the FSGC. The term of office shall normally be a maximum of two years from the first FSGC meeting after the AGM, preceded and succeeded respectively by one year each as Chairman-Elect and Vice-Chairman. Nominations for the office of Chairman shall be proposed and seconded by full members of the FSGC and shall be received by the existing Chairman no later than one calendar month after the AGM. All full members shall vote, using e-mail (or postal) procedures, and a minimum of 12 votes is required for election. Voting shall normally take place 10 months before the existing Chairman's term of office expires. A past Chairman may be re-elected as Chairman only after a period out of office of at least four years.

Strategic Plan and Annual Report. The FSGC shall develop annually, and subsequently keep under review, a Strategic Plan in line with the FSG's aim, which shall include a programme covering proposed FSGC activities for the subsequent 24 months. The Strategic Plan shall be submitted annually to the RAeS Specialist Groups' Committee (SGC). The Chairman shall also submit an Annual Report on the FSG's activities both to the SGC and to the FSG membership. Both the Strategic Plan and Annual Report shall be published at least one month ahead of the AGM and shall be the subject of agenda items at the AGM.

Communication. Communication is the responsibility of every member of the FSG. The FSG Website Forum shall be used pro-actively, and shall include items of industry-wide appeal.

P THARP
Chairman
Flight Simulation Group Committee
Royal Aeronautical Society

11 November 2008

Annex A: Flight Simulation Group Committee.

FLIGHT SIMULATION GROUP COMMITTEE (FSGC)

1 **Chairman.** In addition to chairing FSGC meetings and the AGM, the Chairman shall represent the FSGC on the RAeS Specialist Group Committee (SGC). In the absence of the Chairman, the Chairman's duties shall normally be undertaken by the Chairman-Elect or Vice-Chairman as appropriate.

2 **FSGC Office Holders.** FSGC members, who may hold more than one office concurrently, shall be appointed (for a nominal term of two years) by the FSGC as follows:

2.1 **Business Manager.** The Business Manager shall be responsible for setting the agendas for FSGC meetings in discussion with the Chairman. In principle, as much business as possible shall be conducted ex-Committee.

2.2 **Meetings Secretary.** The Meetings Secretary shall be responsible for compiling the minutes of FSGC meetings and ensuring that a copy is lodged in the RAeS FSGC Minutes Book.

2.3 **Webmaster and Forum Administrator.** The Webmaster and Forum Administrator shall be responsible for maintaining the FSG website pages and the Discussion Forum and the links with the RAeS website. He or she shall be a member of the RAeS Webmasters' Group.

2.4 **Membership, Marketing and Sponsorship.** Marketing and sponsorship is crucial to the FSG's success, and it is incumbent on all FSGC members to be alert to marketing, promotion and sponsorship opportunities. The Membership, Marketing and Sponsorship Officer shall seek sponsors for FSG activities on a pro-active, long-term basis by establishing direct contact with those responsible for marketing budgets, exploiting, inter alia, the Corporate Company scheme. He or she shall also provide advice to the FSGC on marketing and promotional opportunities and shall maintain the FSG membership database. The appointee shall, preferably, be free of commercial interest.

2.5 **Education and Professional Development.** The Education and Professional Development Officer shall be responsible for promoting education and the professional development of those working within the flight simulation industry. He or she shall have particular responsibilities for developing and maintaining links with universities and other centres of academic excellence. He or she shall also maintain a Flight Simulation Careers Flyer and work closely with the RAeS Careers Dept on all aspects of careers and personal development.

2.6 **Communications, Press & Public Relations.** The Communications, Press & Public Relations Officer shall be responsible for the media profile of the FSG, publicising events held under the aegis of the FSGC and for ensuring that appropriate reports are compiled and submitted to the media. He or she shall also be responsible for a web-based resource centre, including lecture material, images and PowerPoint slides, for use, at least initially, by FSGC members.

2.7 **Specialist and Technical Publications.** The Specialist and Technical Publications Officer shall be responsible for oversight of the technical publications the FSGC helped develop. He or she shall also be responsible for maintaining and further developing as necessary all appropriate RAeS papers on flight simulation.

2.8 **Conference Coordinator.** The Conference Coordinator shall seek to ensure that each conference maximises its potential in accordance with the FSG Strategic Plan. The Conference Coordinator shall be responsible for maintaining 'Guidance Notes for Conference Committee (CC) Chairmen' with a view to providing corporate continuity and

advising on best practice. He or she shall also maintain a record of previous conferences (including information on the financial outturn and delegate attendance and feedback) and a list of proposed conference topics.

2.9 **Electronic Newsletter.** An editor shall be appointed to produce an electronic newsletter twice each year, normally in February and September, as a means of communication between the FSGC and the FSG membership, principally using the Website Forum and the electronic mailing list.

2.10 **Branches Liaison.** The Branches Liaison Officer shall be appointed to promote actively the Flight Simulation Group to the RAeS Branches.

2.11 **Chairman of the International Committee for FSTD Qualification (ICFQ).** The Chairman of the ICFQ shall be elected by full members of the FSGC at the FSG AGM. He or she shall be either a serving or a previous member of the FSGC and shall also be an elected member of the ICFQ Steering Committee. The ICFQ Chairman shall represent the ICFQ on the FSGC.

2.12 **Vice-Chairman of the ICFQ.** The Vice-Chairman of the ICFQ shall be elected by full members of the FSGC at the FSG AGM. He or she shall be either a serving or a previous member of the FSGC and shall also be an elected member of the ICFQ Steering Committee.

2.13 **Young Members' Board (YMB).** A member of the YMB shall be an ex-officio member of the FSGC in addition to both full and co-opted members.

3 **Business Process.** The FSGC shall exploit the internet, FSG Website, Website Discussion Forum and electronic mail so far as possible to effect routine work ex-Committee so that meetings may be utilised for the development of important matters that require face-to-face interaction using the intellectual skills and industry expertise of FSGC members.

4 **Communication.** It is incumbent upon all FSGC members both to ensure that the Communications, Press & Public Relations Officer (see 2.6) and the Website and Forum Administrator (see 2.3) has all appropriate information and to seek to correct any time-expired, incorrect or misplaced information.

5 **Annual General Meeting.** The AGM will normally take place at the conclusion of the conference session on the penultimate day of the annual Spring Flight Simulation Conference.

6 **Committee Meetings.** Reports are to be tabled, including when the reporting member is not able to attend a meeting, such that all Committee members have sufficient information before a meeting to enable informed decisions to be taken and to ensure that those who cannot be present are equally informed and have time to express their views should they so wish.

6.1 **Agenda.** The agenda shall be issued in draft at least four weeks before the meeting. Items proposed for addition are to be submitted to the Chairman at least three weeks before the meeting, with appropriate supporting material. The finalised agenda shall be issued two weeks before the meeting. The member placing an item on the agenda shall circulate all relevant documentation ten working days before the meeting to inform the discussion. Each document for consideration at the meeting, and subsequently attached to the minutes, shall be given an appendix number which cross-refers to the agenda item number.

6.2 **Reports.** Reports on agenda items shall be circulated no later than ten working days before the meeting. In the main, the FSGC shall be invited to note the majority of a report; however, novel and contentious matters should be discussed and the way forward agreed. Additional information to clarify an issue, or which was not to hand when a report was circulated, should be issued as soon as possible after the meeting,

and the Chairman shall decide how best to deal with the matter with a view to achieving speedy resolution. A full report shall be prepared after each conference or event which shall include a financial statement and analysis of conference feedback questionnaires.

6.3 **Deadline Dates.** Deadline dates for circulating material to be considered during a meeting will be published in the list of meeting dates and confirmed in the minutes of the preceding meeting.

7 **Conferences and Events.** One conference should be held annually in Spring (normally in early June at 4 Hamilton Place) on significant emerging issues within the flight simulation industry; it shall be known as the 'Spring Flight Simulation Conference' and be sub-titled as appropriate. The aim should be to undertake in each November one other conference or seminar. The FSGC shall be responsible for the annual 'Edwin A Link Lecture' and the annual 'Capt Ray Jones Memorial Lecture'. Opportunities shall be sought for co-hosted events with other groups and organisations, including from outside the UK, whilst ensuring that the FSG's impartiality is not compromised. Opportunities shall also be sought for FSG events collocated with other industry events, notably the Flight Simulation Engineering and Maintenance Conference (FSEMC). The FSG shall remain a significant contributor to other RAeS outputs, notably promoting the flight simulation industry to young people, including through the annual Careers Fair and, where appropriate, the Ballantyne Lecture organised by the YMB. The FSGC shall also seek opportunities to organise lectures at RAeS Headquarters, RAeS Branches and in academia.

7.1 **Proposals for Conferences and Events.** Conference and event themes shall be selected with a view to progressing significant emerging issues in the industry in line with the FSG's Strategic Plan. Proposals for conferences or events shall be developed through the submission to the FSGC of a costed business case which includes all relevant factors, notably the aim, venue, target audience and potential head-count, to enable the FSGC to take an informed view of the viability of the proposed conference. The business case template is at Appendix 1. The business case shall be agreed by the FSGC at least 18 months before the proposed event. Intended delegate numbers shall be matched to the event aim, and appropriate experts in specific subject areas approached with a view to presenting papers that contribute to the development of key themes.

7.2 **Conference and Event Management.** The FSGC shall appoint a full FSGC member as Chairman of each Conference Committee (CC), together with up to three other people (at least one of whom shall be an FSGC member) to assist as Subject Matter Experts. CC members who are not members of the FSGC shall be approved by the FSGC. Once the FSGC has agreed the business case, subject to appropriate revisions, the CC shall take forward the detail, adhering to the agreed timetable. Progress reports shall be submitted for FSGC meetings to note or discuss, if appropriate. The CC shall also be responsible for developing all appropriate publicity material, including web-based information, press releases and so forth, in conjunction with the RAeS Media & Public Relations Manager, who will provide advice on corporate guidelines.

7.3 **Sponsorship.** Each CC shall ensure that sponsorship is obtained for its event. Liaison shall be maintained with the Membership, Marketing and Sponsorship Officer (see 2.4).

7.4 **Marketing.** Marketing shall be the responsibility of event-organisers on the FSGC. The aviation media shall be kept informed of the FSG's activities insofar as possible whilst retaining the FSG's impartiality.

7.5 **Annual International Flight Crew Training (IFCT) Conference.** The FSGC shall support the RAeS Annual IFCT Conference Committee, together with members of other appropriate Specialist Groups. A portfolio holder shall be appointed to serve as a permanent member of the IFCT Conference Committee.

8 **Liaison.** The FSGC shall maintain a working relationship with and contribute to industry and other national and international organisations in the field, such as:

8.1 **Civil.** The airlines, training centres and other organisations delivering synthetic training; the UK CAA, EASA, and National Aviation Authorities worldwide; IATA and ICAO; R&D organisations and universities; and the Guild of Air Pilots and Air Navigators (GAPAN) and other professional bodies.

8.2 **Military.** The UK MOD and the UK armed forces and their synthetic training providers; other national defence organisations and synthetic training providers; and the UK Defence Science & Technology Laboratory and other national and international organisations involved in R&D.

8.3 **Industry.** The flight simulation and training industry; synthetic environment manufacturers and users; and aircraft manufacturers and sub-contractors; AIAA and FSEMC.

8.4 **RAeS Branches.** The FSGC shall maintain a close working relationship with RAeS Branches and shall assist with Branches' lecture programmes, keeping the RAeS External Affairs Manager informed as appropriate. Where possible, a registered FSG member shall become the FSG representative within the Branch to provide a conduit for information flow.

8.5 **RAeS Specialist Groups.** The FSG shall meet, when appropriate, with other relevant Specialist Groups to explore areas of mutual interest and to agree mechanisms for mutual support.

9 **Professional Development.** The FSG shall be fully engaged with the professional development of those working within the flight simulation industry through such means as part-day seminars at venues such as an appropriate university, research establishment or site used by a Branch. The FSG shall also support the Cranfield University short course on the 'Introduction to Flight Simulation' and the Merlin University Flight Simulation Competition, and FSGC portfolio holders shall be appointed with appropriate responsibilities for liaison with these activities.

10 **Flight Simulation Medal.** In 1991, 25 silver medals were struck, sponsored by the FSGC and endowed by CAE Industries and Rediffusion Simulation Ltd. The Flight Simulation Medal may, if there is a suitable, international, living individual, be awarded annually for 'Achievement in the Field of Flight Simulation', defined in this context as:

'The employment of art, science and technology to provide a working imitation of the behaviour and environment of aerospace vehicles or sub-systems with sufficient fidelity to enable one or more crew members to operate the aerospace vehicle or sub-system for the purpose of research, development or training.'

Nominations for RAeS medals and awards shall be made under arrangements published by the RAeS. Note that this requires that nominations are made directly to the Medals and Awards Committee. The M&A Committee will submit for the FSGC's consideration those nominations where it deems the award of the Flight Simulation Medal might be appropriate. The Chairman of the FSGC shall distribute the citations to each full member of the FSGC; all citations shall be kept in confidence and discussed only with other full members of the FSGC. The Business Manager shall place discussion about the award of the Flight Simulation Medal on the agenda of an appropriate FSGC meeting; FSGC members unable to attend shall communicate their comments and their wishes in respect of a vote to the Chairman by 1200 hours on the day before the meeting. At the meeting, the Chairman shall read any comments, and FSGC members present shall be given an opportunity to speak for or against each nomination. In the event that no nomination is considered to merit the award, the FSGC shall retain the right to recommend to the Medals and Awards Committee that no award be made that year. In the event that unanimous agreement cannot be reached, the Chairman shall call for a vote, using the procedures at para 11 below and respecting as

appropriate the wishes of FSGC members unable to attend. A record of the voting intentions shall be kept by the Chairman, who shall also vote. On the conclusion of any voting, the Chairman shall invite all FSGC members present to endorse the winner as the unanimous choice of the FSGC, and shall notify the outcome to the M&A Committee at the earliest opportunity. The outcome shall be kept in confidence until after it has been announced by the Society and shall not be included in the minutes of the meeting. When it is not possible for the award to be discussed in Committee, the Chairman shall make arrangements to put in place ex-Committee procedures that mirror as closely as possible those above. In the event that circumstances arise that are not covered by these procedures, the Chairman shall consult the FSGC on how best to proceed.

11 **Voting Procedures.** For voting on matters when the FSGC is in session, regardless of whether a quorum is present, the FSGC shall agree whether it is appropriate to proceed to a vote or whether the matter requires an e-mail (or postal) vote by the entire FSGC subsequent to the meeting. The following general procedure shall be adopted by the FSGC where a single person is to be chosen from several candidates, notably for FSGC Chairman or the recipient of the Flight Simulation Silver Medal.

11.1 **Voting.** Voting shall be by secret signed ballot papers, with returns counted by the Chairman. All full FSGC members shall be eligible to vote. If deliberations are to take place in-Committee, any nominees present shall leave the room during the period of discussion that concerns them. The Chairman shall have a vote and, in the event of a tied vote not resolved by the procedure below, shall have a second secret casting vote. An e-mail from an authorised and identifiable source shall be deemed to constitute a signed voting paper; such returns shall include an order of choice of some or all of the candidates.

11.2 **Two Candidates.** A simple majority shall be conclusive.

11.3 **More than Two Candidates.** A candidate receiving at least 12 votes on the first ballot shall be elected; otherwise the two candidates receiving the highest number of votes in the first ballot shall go forward to a final ballot. If two or more candidates tie for second place, the tie shall be resolved by a further secret ballot or ballots before the final vote.

12 **Name Badges.** Name badges in the approved RAeS corporate style shall be worn by FSGC members on all public occasions to provide readily identifiable points of reference. It is the responsibility of new Committee members to arrange their badge details with the Society staff.

Appendix 1: Conference Business Case Template.



APPENDIX 1

CONFERENCE BUSINESS CASE TEMPLATE

FLIGHT SIMULATION GROUP

[YEAR] [TIME] CONFERENCE - [DD-DD MONTH YEAR]

'CONFERENCE TITLE'

TO BE HELD AT NO.4 HAMILTON PLACE LONDON

BUSINESS CASE FOR FSGC CONSIDERATION

1. **Conference Committee.** Chairman: [Name]. Other members: [Name], [Name] and [Name].
2. **Conference Title.**
3. **Conference Aim.**
4. **Scope of Conference.** [Scope and issues to be addressed.]
5. **RAeS Specialist Groups.** [Set out the other Specialist Groups consulted and their involvement.]
6. **Conference Format.**
7. **Society Facilities Required.**
8. **Target Audience, Exhibitors and Proposed Headcount.** [Target audience [***] delegates and [*] exhibitors.]
9. **Outline Programme:**
 - Keynote Speakers:** [Details of planned keynote speaker(s).]
 - Day One [*] Sessions** comprising (but not necessarily in this order):
 - [Issue]
 - [Issue]
 - [Issue]
 - Day Two [*] Sessions** comprising (but not necessarily in this order):
 - [Issue]
 - [Issue]
 - [Issue]
10. **Sponsors.**
11. **Promotion.**

12. **Provisional Key Milestones:**

- [Date – 18 months]. Outline Plan approved by FSGC.
- [Date – 15 months]. Draft Call for Papers cleared by FSGC (ex-Committee).
- [Date – 13 months]. Call for Papers issued.
- [Date – 10 months]. Deadline for receipt of Abstracts.
- [Date – 9 months]. Abstract Review Meeting, Sponsorship and Programme Drafting.
- [Date – 8 months]. Draft Programme submitted to FSGC (ex-Committee).
- [Date – 7 months]. Programme issued.
- [Date – 2 months]. Papers scrutinised. Programme reviewed and revised.
- [Date]. Conference.

13. **Fee Structure.**

Non-members	£575 + VAT
Corporate Members	£485 + VAT
Members	£395 + VAT
Retired Members	£125 + VAT

14. **Outline Budget:**

INCOME

Non-members	[**] @ £[***]	£[****]
Corporate Members	[**] @ £[***]	£[****]
Members	[**] @ £[***]	£[****]
Associates/Graduates/Students	[**] @ £[***]	£[****]
Retired Members	[**] @ £[***]	£[****]
Speakers, Session Chairmen, etc	[**] @ £0	£0
Press	[**] @ £0	£0
Exhibitors		£[****]
Sponsors		£[****]
Total Income		£[****]

SPEND

Society Overheads		£[****]
Printing		£[****]
Mailing		£[****]
Advertising		£[****]
Speakers' Dinner		£[****]
Evening Reception		£[****]
Catering		£[****]
Proceedings on CD ROM		£[****]
Other		£[****]
Total Spend		£[****]
NET INCOME		£[****]