



DARS/9/5/2

All AFFSC(E) Members

January 2010

AIR FORCES FLIGHT SAFETY COMMITTEE (EUROPE) - WORKING RULES

TERMS OF REFERENCE

1. The Terms of Reference of the Air Forces Flight Safety Committee (Europe) (AFFSC(E)) are:
 - a. To provide a means of exchanging information and opinion on all matters of mutual concern in the prevention of aircraft accidents or incidents and the furtherance of safety awareness.
 - b. To afford an opportunity to gain knowledge and up-to-date information on aviation safety in general and on specific aviation topics.
 - c. To permit the informal personal contact between members which is essential to foster a mutual understanding of flight safety needs of individual air forces or military aviation organisations.

MEMBERSHIP

2. The Committee will generally consist of representatives of the flight safety staffs of European Air Forces, the Canadian Forces and the European-based elements of the United States Air Force. However in a number of nations the flight safety responsibility lies in Joint Headquarters or the Defence Ministry. Membership may be suspended or cancelled if member nations fail to attend 3 consecutive conferences. The current full members are Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Jordan, Lithuania, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, UK and USAFE. In addition a representative from the NATO AEW Force Cdr also attends.

CHAIRMAN AND SECRETARY

3. The posts of Chairman and Secretary will be held permanently by the United Kingdom; the Chairman being the Director of the Directorate of Aviation Regulation and Safety and the Secretary one of his Staff Officers.

CONFERENCES

4. **Representation.** Each nation should limit its representation at conferences to 2 delegates, except for the host nation who may be represented by up to 4 delegates. The UK representative is additional to the posts of Chairman and Secretary. Ideally, the same

representatives should be retained throughout their tours of duty in order to maintain continuity. Attendance at conferences will normally be limited to permanent members, but visitors may be invited to attend specific agenda items or as guest speakers.

5. **New Members.** Applications for full membership will be considered by a majority voting system, with each country having one vote. While generally these votes will occur during the conference it is acceptable for applications to be considered between conferences. The Secretary will administer the procedure and ensure that a formal record is kept of the decision.

6. **Observer Nations.** Nations that may wish to join or that may benefit from membership may be invited to attend as 'observer nations'. With a significant number of European nations already members it may be appropriate to invite those nations bordering on Europe to join as observers, especially where there is already significant interaction. A maximum of 3 unsuccessful invitations would be sent to each nation before removal from the observer nations list. The Committee may also invite a representative of military aviation from another part of the World to attend AFFSC(E) meetings on a one-off basis to provide the membership with an alternate flight safety perspective and broaden international flight safety awareness and co-operation.

7. **Frequency and Dates.** AFFSC(E) conferences will be held **annually** with the dates decided by consensus at the previous meeting. That said the Host Nation's wishes should be followed if at all possible. The dates should deconflict with major exercises and commitments in which members are likely to be involved.

8. **Duration.** Meetings will normally last for 4½ working days.

9. **Venue.** Each nation, in turn, will host the meeting in their country. The USAFE will select a suitable venue in Europe. In order to enable timely preparation the hosts for the next 2-3 years will generally be agreed at each meeting. The Secretary is to maintain a list of previous hosts.

10. **Delegate seating.** Where space is at a premium within the conference facility, the priority is to allocate each nation a single seat at the table before filling any remaining space with seats for additional national delegates. This also applies to Observer Nations.

11. **Programme.** In consultation with the secretary, the host nation is to prepare a programme which will include any appropriate social and cultural events. Many members bring wives and partners with them and the Host Nation should provide a suitable programme. Dependent on the conference agenda either a day or ½ day should be available for the members to join their wives on the cultural programme. Both programmes should be distributed at the same time as the agenda.

12. **Agenda.** A Theme for the conference will routinely have been decided at the previous meeting. The Secretary, in consultation with the Host Nation will distribute a draft agenda 3 months prior to the conference. Members who wish to raise new items should normally advise the Secretary no later than 6 weeks before the meeting. At the same time, full details of the background to such items, together with supporting papers where appropriate, should be distributed to all members in order to ensure that they may be fully prepared to participate in the subject discussion. In the course of tabling an item for the agenda, members may request written answers prior to discussing the item in session. Whenever possible, written answers should be distributed before the meeting. If a question needs to be considered urgently, the answer should be sent by email, signal or fax. The Secretary will distribute the final agenda no later than 4 weeks before each meeting.

13. **Presentations.**

- a. At each meeting, members should give a presentation on **a maximum of 3** accidents or serious incidents that highlight either the theme of the meeting or a specific flight safety topic of concern. Details of individual accidents and incidents since the previous meeting should be exchanged prior to each meeting using the AFFSC(E) Accident/Serious Incident Exchange Form at Annex C.
- b. Members should brief the meeting on any significant flight safety concerns or trends affecting their air forces or military aviation including actions taken to improve flight safety.
- c. Each presentation should take **no longer than 20 minutes**. The presentations should be, wherever possible, PowerPoint based. Where it is felt that the presentation justifies a longer time slot the Secretary should be approached at the earliest opportunity to ascertain the feasibility.
- d. There was no requirement to brief statistical data as part of the national presentations unless it was necessary to make a specific point. However each member should provide statistical slides including a graph showing the accident rate per 10,000 hrs for the last 5 years for inclusion in the post conference CD Rom..
- e. Flight safety media files (compatible with Windows movie player) may be shown at meetings. Members wishing to present recordings should advise the Secretary of the title and duration before the meeting in order that the appropriate amount of time may be made available. In all cases, members should consult the host nation or Secretary beforehand to ascertain whether the appropriate equipment will be available.
- f. Each nation is to provide a copy of their presentation and statistical slides to the Host Nation. A CD Rom with all presentations will then be provided to all attendees at the end of the conference. Additional copies are to be provided to the Secretary who will then ensure those members absent receive a copy. The Secretary will also ensure that absent members receive copies of any paperwork circulated at the conference

14. **Costs.** Member and Observer nations are responsible for their own travel and subsistence costs for the duration of the conference. In addition all attendees, including wives and partners, are required to pay an appropriate Conference Fee (100 Euro in Jan 10 value). This covers refreshments during the conference, the social programme and the Conference Dinner on the last evening. Guest speakers are also liable for their own costs unless the Host Nation is willing to cover them.

SUB COMMITTEES

15. While significant work is conducted at the AFFSC(E) conference, relatively little is done to pursue specific issues in the interim. A series of sub-committees are to be set up, each with 3-4 members, who can work together on specific issues in order to maintain momentum and liaison with other key stakeholders across the aviation community. Once formed Terms of Reference are to be agreed by all members out of committee. The Chairman of each sub-committee will then present an update on work in progress to the annual conference. The following sub committees are in place:

- a. **Legal imperatives and constraints/Protection of Data.**
Chair Germany.
Member(s) USAFE
- b. **European Space Agency/Fly Safe.**
Chair tbc
Member(s) Belgium
Netherlands
- c. **Unmanned Aerial Systems (UAS).**
Chair UK (Secretary)
Member(s) Canada
Switzerland
- d. **EUROCONTROL/Safety Team.**
Chair NATO AEWFC
Member(s)
- e. **Operational Lessons.**
Chair tbc
Member(s) tbc
- f. **Aviation Safety Training.**
Chair tbc
Member(s) tbc

DEFINITIONS

16. The following definitions are applicable to AFFSC(E)::

- a. **Major Air Accident.** A major air accident is an occurrence involving an aircraft during its period of operation (that is, from the time the aircrew board the aircraft with the intention of flight, until the last aircrew member has deplaned) which damages the aircraft to such an extent that it is disposed of as scrap or components. An aircraft reported missing is to be regarded as destroyed, and hence classified as a major accident. If an aircraft is not repaired because of financial or short life remaining considerations, but would be considered as repairable under normal circumstances, it is not to be classed as destroyed.
- b. **Major Ground Accident.** A major ground accident is an occurrence involving an aircraft outside its period of operation which damages the aircraft to such an extent that it is disposed of as scrap or components. If an aircraft is not repaired because of financial or short life remaining considerations, but would be considered as repairable under normal circumstances, it is not to be classed as destroyed.
- c. **Serious Flight Safety Incident.** A serious flight safety incident is an occurrence involving an aircraft during its period of operation which, in the opinion of the flight safety staffs, gave a very high risk of an accident. Such incidents could include a mid-air collision between formation elements which does not result in an accident, Airprox reports which were assessed as having high risk of collision or major bird strikes. These examples are not exhaustive and any incident which is regarded as high risk but does not result in an accident could be included.

- d. **Accident Rates.** Accident rates quoted in presentations are to be calculated in accordance with the definitions of major air and major ground accidents given above. All rates are to be quoted per 10 000 flying hours.

INFORMATION EXCHANGE

17. **Classification and Circulation of Information.** Information on circulation to AFFSC(E) members will be of no higher security classification than Restricted. All information will be exchanged by e-mail using the AFFSC(E) Master Address List.

18. **Forms in Use.** The forms used for routine exchange of information between AFFSC(E) members are:

a. **Annual Analysis of Fatalities and Aircraft Destroyed.** This form will be exchanged by members once a year, **ideally in January** and covering the preceding calendar year. The forms will provide statistical information for comparison purposes and will include details of the major accidents and flying effort in that preceding year. Ground accidents are also to be reported. A template will be available on the AFFSC(E) web page and a copy is at Annex A, together with instructions for its completion. Annex B details the accident cause codes to be used. If causes have not been determined at the time of completion of the form, provisional causes should be annotated 'Not Yet Determined' (NYD).

b. **Conference Accident/Information Exchange Form.** This form, comprising 4 parts, is to be used to exchange of information on accidents and significant incidents, significant concerns and statistics in preparation for the conference. It covers the period since the last conference and is to be submitted by e-mail to all members and the Secretary at least 4 weeks before the next conference. This form may also be used at any stage of the year to provide timely information on accidents or significant incidents, particularly Part 1. The information and statistics provided to the AFFSC(E) could be Joint or national Air Force provided the return makes it clear.

- 1) Part 1 describes briefly any major accidents that have occurred since the previous meeting and includes, where possible, causes and any remedial action taken.
- 2) Part 2 gives further information on previously reported accidents, the investigation of which had not been concluded at the time of the previous conference.
- 3) Part 3 gives a summary of flight safety concerns, trends or initiatives.
- 4) Part 4 provides statistical slides including a graph showing the accident rate per 10, 000 flying hrs for the last 5 years. Within this graph, the accident rate for each group should be shown separately, together with the combined rate. UAV accident rates should be included in the Information Exchange return but not be part of the overall accident rate. An accident rate for parachutist should also be included in the return for those accidents attributable to the way the parachutist was dropped from the aircraft.

19. **Publicity Material.** Members should circulate new flight safety or other associated publicity material issued by their organisation. Key words and phrases on posters should be translated into English if required.

20. Information of mutual interest to all members concerning any hazard should be circulated by the fastest possible means, usually e-mail.

ROUTINE INFORMATION

21. **List of Members Addresses.** A master list of members' addresses, telephone numbers and e-mail addresses will be maintained by the Secretary and issued with the minutes of each meeting. They will also be published on the AFFSC(E) web page. Any changes to the Master Address List are to be passed to the Secretary at the earliest opportunity and a full update provided with their annual Information Exchange returns. The Secretary will then ensure an amended copy is passed to all members. With the Master Address List published on the AFFSC(E) web page on the Internet there is potential for junk or spam e-mail to be received.

22. **Aircraft type specific information exchange list.** In order to get aircraft type-specific safety information to the right people in other nations who operate the same type of aircraft a set of contact sheets have been pulled together by the Secretary. Members are not limited to a single point of contact for each specific aircraft type but the individuals nominated should be the lead for flight safety for that type of aircraft. Members are to ensure that the Master List is up to date and inform the Secretary of any amendments. A copy of the Master List is published on the AFFSC(E) web page.

Electronically signed

A PRINGLE
Lieutenant Commander Royal Navy
Secretary

Annexes:

- A. Annual Analysis of Fatalities and Aircraft Destroyed.
- B. Accident Cause Coding.
- C. Accident/Incident Exchange Form.

NATION:	AIR FORCES' FLIGHT SAFETY COMMITTEE (EUROPE) ANNUAL ANALYSIS OF FATALITIES AND AIRCRAFT DESTROYED
YEAR:	
PART ONE: FLYING EFFORT	

Annex A to
AFFSC(E) Working Rules
Dated Dec 09

PART ONE: FLYING EFFORT			PART TWO: RESUME OF ALL ACCIDENTS												
GROUPS OF AIRCRAFT (a)	AIRCRAFT TYPE (b)	FLYING HOURS (c)	SERIAL NO (a)	AIRCRAFT TYPE (b)	ROLE (c)	PHASE (d)	TYPE OF ACCIDENT (e)	CAUSES (f)	AIRCRAFT DESTROYED (YES/NO) (g)	NUMBER OF FATALITIES				EJECTED (m)	SUCCESSFULLY
										NON OCCUP'S (h)	DID NOT ABANDON (j)	EJECTED (k)	BAILED OUT (l)		
FIGHTERS			AIR												
			TOTAL												
			GROUND												
			TOTAL												
SUB-TOTAL			UAS*												
TRAINER			Total												
			HOSTILE ACTION (not included in accident rates).												
SUB-TOTAL															
OTHERS															
SUB-TOTAL															
HELICOPTER															
SUB-TOTAL															
TOTAL															
UAS*															

ACC RATE (Not including hostile action losses)			
FIGHTER RATE			
TRAINER RATE			
OTHERS RATE			
HELICOPTER RATE			
OVERALL RATE			
UAV RATE*			

*Excludes smaller UAS

N.B. This return should be completed and exchanged at the beginning of each year when the previous whole years flying hours are known.

INSTRUCTIONS FOR COMPLETING THE AFFSC(E) ANNUAL RETURN

Part 1 - Analysis of Flying Effort

1. Aircraft Groups and aircraft type are to be listed and the flying hours achieved entered by each type and group (see para 6) below; a grand total of flying hours is also to be entered.

Part 2 - Fatalities and Aircraft Destroyed

2. List all Air and Ground Occurrences defined as Major Accident or Major Ground Accident. For ground accidents use Code Letter G in column (c).

3. The code letters describing the phase of flight, to be listed in column (d), are listed at Para 7.

4. The code letters describing the type of accident should be extracted from Annex B and inserted in column (e).

5. The cause Identification Number entered in column (f) should be extracted from the list below. (Para 7)

6. The destroyed rate per 10 000 flying hours should be entered at the foot of the return against the 5 roles listed below. The UAV accident rate is not to be included in the overall rate that is to be provided.

7. Decodes for Groups of Aircraft, Phase of Flight and Accident Cause.

F Fighter

T Training

H Helicopters

O Others (includes Transport, Surveillance, Maritime Patrol)

U Unmanned Aircraft Systems

Phase

S Stationary

T Taxiing

TO Take Off

F Flight

L Landing

OSH Overshoot

Causes

P Primary

C Contributory

1 Technical defect

2 Servicing error

3 Aircrew Error

a. Pre-Flight

b. Disciplinary

c. Cockpit drills

d. Skill

e. Operational technique

f. Other aircrew error

4 Organisational fault

5 Supervisory deficiency

6 Birdstrike

7 Natural hazard other than birdstrike

8 Operational hazard (e.g. ricochet but excluding enemy action)

9 Foreign Object Damage

10 Other causes

11 Under Investigation

12 Not Known

These codes will identify Primary and Contributory causes when used in combination such as:

P1/C4

This would denote a technical Defect as a Primary cause with a Contributory Organisation Fault.

AFFSC(E) CODE OF TYPES OF AIRCRAFT ACCIDENTS

Serial No	Code Letters	Type of Accident	Definition
1	AF	Airframe failure in flight	All occurrences in which a failure of any part of the aircraft structure occurs while the aircraft is in flight, regardless of cause and result. Includes explosive decompression.
2	AG	Airframe failure on ground	All occurrences in which an airframe failure occurs on the ground while the aircraft is being operated.
3	BL	Wheels up landing	All occurrences in which the landing gear was not lowered and locked prior to contact with the ground. Includes intentional retraction. Excludes collapse due to failure or malfunction of the gear assembly and retracting mechanism.
4	BS	Collision with birds	To be used where collision with a bird in flight resulted in aircraft damage and/or injury to person(s).
5	CA	Collision between aircraft	Self-Explanatory.
6	CFIT	Collision with ground (or water)	Collision with either level ground or water when the aircraft is under control of the pilot. Excludes collisions preceded by loss of control, fires, explosions or airframe failures.
7	CO	Collision with objects	To be used only as primary type if the aircraft was substantially damaged as a result of the collision but remained controllable or if the aircraft would not otherwise have struck the ground or water. To be used as a secondary type any time the primary type is undershoot, overrun, collision, rising terrain, loss of control etc.
8	CR	Collision with runway	All occurrences in which a part of the aircraft other than the undercarriage or arrester hook struck the runway. Excludes wing tips, rotor tips, pods or floats.
9	CFIT	Collision with rising terrain	All occurrences in which an aircraft fails to clear rising terrain along its flight path.

10	DI	Ditching	All occurrences in which the aircraft ditched in water.
11	DW	Dragged wing/rotor tip, pod or float	All occurrences in which an aircraft drags a wing or rotor tip, a pod or float while taxiing, taking off or landing, without loss of directional control. Not used in conjunction with "Heavy landings" or "Loss of Control on ground".
12	EF	Engine failure	All occurrences in which one or more engines fail, or have to be shut down in flight, and are the exciting cause of an accident.
13	FF	Fire or explosion in flight	All occurrences in which heavy smoke, fire or explosion occurs in flight without causing an airframe failure.
14	FG	Fire or explosion on ground	All occurrences in which fire or explosion occurs on the ground. Excludes those which occurred following impact with ground, water or objects.
15	FL	Forced landing	All occurrences in which further flight was impossible.
16	GC	Gear collapsed	Collapse of the landing gear due to a mechanical failure other than malfunction of retracting mechanism. When gear collapsed as a result of a hard landing, gear collapse will be a secondary type.
17	GR	Gear retracted	Retraction of the landing gear due to malfunction of retracting mechanism or to inadvertent retraction of gear by the crew, or premature retraction of gear by the crew during the take off phase. Excludes intentional retraction.
18	HL	Heavy landing	Landing with abnormal high vertical speed.
19	IF	Injuries to persons in flight	All occurrences in which persons aboard an aircraft are injured in flight as a result of severe turbulence, violent manoeuvre, criminal act etc. Excludes those occurrences in which the aircraft structure was substantially damaged or a loss of control occurred. In such cases the type of accident will be appropriate: Collision aircraft, objects or birds; airframe failure in flight, fire or explosion in flight, loss of control in flight, etc.
20	IP	Injuries to persons by propeller/rotor	All occurrences in which persons are injured as a result of contact with the rotating propeller or rotor of an aircraft.

21	J (P) B	Jet efflux/propeller blast	All occurrences classifiable as accidents in which persons are injured on the ground either as a result of propeller blast, suction or efflux of a jet engine; or in which other aircraft on the ground are damaged due to propeller blast or jet efflux.
22	LB	Landing beside intended landing area	Landing or making contact with ground on the side of the runway or outside the intended landing area. Includes collisions with objects occurring in the above circumstances.
23	LCF	Loss of control in flight	All occurrences in which the aircraft went out of control and/or struck the ground or water out of control. Excluded those which occurred following an in flight fire, explosion, air frame failure, engine tear-away or collision with another aircraft, a bird or object.
24	LCG(W)	Loss of control on ground (water)	Loss of directional control or sudden swerve while taxiing, taking off, or landing (except overrun).
25	ND	Nose down	Nosing down on to ground/water or runway but not going over the back.
26	NO	Nose over (inverted)	Going completely over on the back.
27	OR	Overrun	Running off the end of the take-off or landing area including any resulting collision with objects. Includes ground looping, nosing down or over, or retracting gear to prevent running off and landing beyond the intended landing area.
28	PD	Parts detached	All occurrences in which parts of the aircraft or stores become detached inadvertently, or are released intentionally
29	PL	Precautionary landing	All occurrences in which further and continued flight was possible but inadvisable under the existing circumstances.
30	RI	Ricochet	Self explanatory
31	US	Undershoot	Landing or making contact with ground/water short of runway or other intended landing area. Includes collisions with either ground or objects occurring in the above circumstances.
32	WD	Wheels down alighting on water	Applicable only to amphibians.
33	Z	Other	All occurrences of an unusual nature which cannot be classified under any of the preceding types.
34	U	Undetermined	When the type of accident cannot be reasonably determined.

AFFSC(E) ACCIDENT / SERIOUS INCIDENT EXCHANGE FORM

NATION _____

Part 1 Accidents and Serious Incidents since the last Conference in the following format:

- A. Date.
- B. Aircraft.
- C. Pilot – experience, proficiency, currency.
- D. Stage of Operation/Flight.
- E. Casualties/Damage Category
- F. Narrative description, Cause and Remedial Action.

Part 2 Further information on previously reported Accidents/ Serious Incidents.

Part 3 Flight Safety Concerns, Trends and Initiatives.

Part 4 National Statistics.