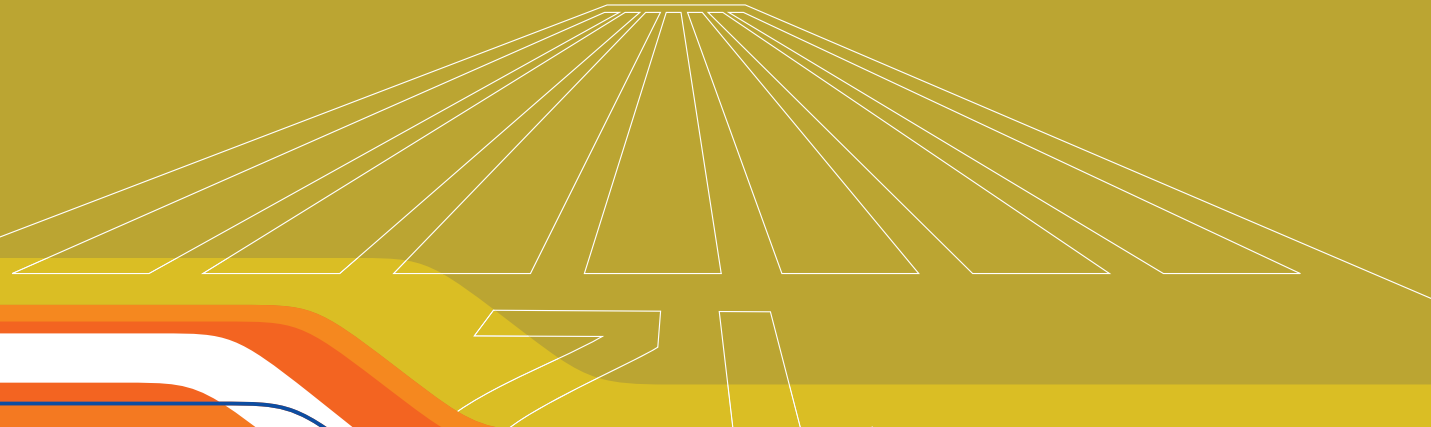




Les symposiums

AUTORITÉ DE SURVEILLANCE

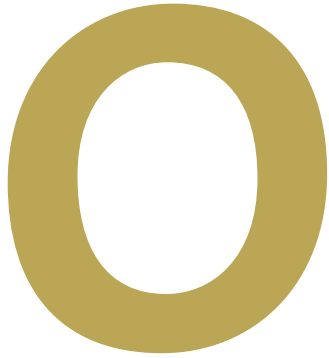
STATUS OF UNSTABLISHED APPROACH ACTION PLAN



direction générale de l'Aviation civile

direction du Contrôle de la sécurité





On the 29th November 2006, the Department of Safety Management (DCS) organised a symposium on Unstabilised Approaches which was attended by a large number of operators.

Numerous actions were put forward during this symposium and the DCS agreed to report back on them.

In accordance with this commitment, you will find below the degree of progress made by May 2008 on each of the actions decided following the symposium.

All the documents on Unstabilised Approaches (and particularly their desired outcomes) are available at the following web address:

http://www.aviation-civile.gouv.fr/html/actu_gd/ans/ans.htm

SUMMARY

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ACTION I

SUMMARY ANALYSIS OF INVESTIGATION INTO UNSTABILISED APPROACH ACCIDENTS AND SERIOUS INCIDENTS

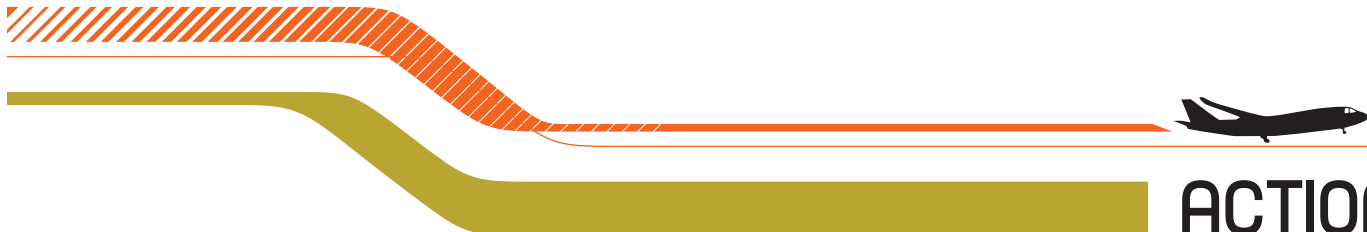
→ 1 • CARRY OUT AN ANALYSIS OF INQUIRIES INTO ACCIDENTS OR SERIOUS INCIDENTS FOLLOWING AN UNSTABILISED APPROACH.

The synthesis in French can be found at the following address:

http://www.aviation-civile.gouv.fr/html/actu_gd/ans/Les%20documents/ANS-BEA.pdf

The synthesis in English can be found at:

http://www.aviation-civile.gouv.fr/html/actu_gd/ans/Les%20documents/Nouveau%20dossier/ANS%20Yannick/traduction%20en%20anglais%20des%20documents%20ANS/BEA12P+4COUV-V2.pdf



ACTION II

THE GO AROUND

→ 2.1 • STANDARDISATION OF POSITIVE CALLOUTS “STABILISED” OR “GO AROUND”.

An operational directive makes this action compulsory.

It is available at the following web address:

http://www.aviation-civile.gouv.fr/html/prospace/pilots_exploitants/consignes_op/pdf/F-2008-01.pdf

→ 2.2 • ENCOURAGE THE AIRLINES TO PRACTICE GO AROUNDS AT HIGH ALTITUDE OR HIGH ENERGY DURING PROFICIENCY TEST AND TYPE QUALIFICATION TRAINING.

In February 2007 the DCS sent out a letter suggesting to the airlines that they practice a Go Around at high altitude or high energy during Proficiency Test or Recurrency Training.

The replies received by the DCS have led them in conjunction with the Organisation for Control in Flight, to draw up a directive aimed at training organisations asking them to carry out an extra exercise of a high energy Go Around during Proficiency or Recurrency Training.

This directive was produced by the DCS in October 2007.

→ 2.3 • CREATE AN UNSTABILISED APPROACH AWARENESS TRAINING MODULE FOR FIs/CIIs/SFIs/TRIs.

In May 2008 the DCS sent out instructions asking the pilot training organisations (FTO/TRTO) to add a module for raising instructor (FI/CRI/SFI/TRI) awareness on unstabilised approaches.

In addition, new training standards are appearing as part of the MPL licence. Among other things these introduce the principle of training based on acquisition of competences (“competency based training”) and Threat and Error Management (TEM). These general principles cover knowledge of the risks associated with piloting an aircraft.

See:

http://www.aviation-civile.gouv.fr/html/prospace/reglemen/RTA3-LICENCES/1_GENERALITES/FCL1consotome2.doc

Unstabilised Approaches are part of the risks which should be taught during training.

Nevertheless, these requirements are not yet compulsory for the other licenses, i.e. the ATPL or CPL.

In addition, the DCS plans to extend these requirements to the other licenses and to ask the European Aviation Safety Agency (EASA) to extend these concepts to a European level.

EASA Site: <http://easa.europa.eu/home/index.html>

The DCS directive is available on the Internet at:

http://www.aviation-civile.gouv.fr/html/prospace/exam/ecoles_ formations/formpilo/pdf/ANS.pdf

→ 2.4 • ASK PILOT TRAINING SCHOOLS TO LET TRAINEES RECOGNISE AND EXECUTE THE GO AROUND BY THEMSELVES.

In May 2008 the DCS sent out instructions to the professional and private pilot training organisations in accordance with the above action.

These instructions are available at the web address:

http://www.aviation-civile.gouv.fr/html/prospace/exam/ecoles_ formations/formpilo/pdf/ANS.pdf

→ 2.5 • ADD AN EXERCISE TO MCC COURSES WHICH SIMULATES THE ACTIVE INCAPACITY OF A FLIGHTCREW MEMBER DURING APPROACH.

After consultation, it appeared that implementation of this measure would have been too difficult given the already high workload and given there was no consensus about its benefits.

However, the DCS considers that the development of Competency Based Training (CBT) and TEM (see action 2.3) will contribute to enhanced awareness of the role of the Pilot Not Flying.

→ 2.6 • FROM AN ATM POINT OF VIEW, AVOID “ALTITUDE” CLEARANCES DURING THE GO AROUND WHICH BY ADDING WORKLOAD DO NOT SUIT A MISSED APPROACH.

By their very design, missed approach procedures depend on the geographic nature and the air traffic environment of the airfield with which they are associated.

The DSNA will therefore seek the opinion of crews using existing local consultation structures (see actions 3.5 and 3.6).

An evaluation of the results of this consultation will be carried out jointly by the DCS and the DSNA in the summer of 2009.



ACTION III

LEARNING FROM EXPERIENCE, RADAR USAGE AND RECURRENT TRAINING OF AIR TRAFFIC CONTROLLERS

→ 3.1 • TERMINATE RADAR CONTROL ON A PUBLISHED PROCEDURE AT THE FAP OR FAF ALTITUDE AND ON THE FINAL APPROACH PATH.

The DSNA has developed a feature called “chevrons” to visualise the Intermediate Approach Interception Point. This feature is shown on the radar screens and has been installed at the following airfields:

SUMMARY BY THE SNA ON APPROACH PROCEDURES EQUIPPED WITH “CHEVRONS”

SNA-N	Beauvais – Lille – Melun
SNA-NE	Bâle Mulhouse – Strasbourg – Metz Nancy Lorraine
SNA-O	Brest – Nantes – Rennes – Quimper – Le Havre – Deauville – Caen – Angers – Saint Nazaire – Dinard – Lannion – Cherbourg
SNA-CE	Saint Exupéry – Lyon Bron – Clermont-Ferrand – Grenoble – Chambéry – Annecy
SNA-SSE	Marseille – Montpellier – Béziers – Perpignan (début du guidage radar, prévu pour 2008)
SNA-SE	Nice – Cannes – Ajaccio
SNA-S	Toulouse – Agen – Albi – Carcassonne – Castres – Rodez – Limoges – Tarbes
SNA-SO	Bordeaux – Biarritz – La Rochelle – Poitiers – Bergerac – Châteauroux – Pau
SNA-AG	Martinique Aimé Cézaire – Pointe à Pitre Le Raizet
SNA-RP	Orly – CDG – Le Bourget

Discussions between the DCS and the DSNA on the development of this feature are continuing to ensure that interception of the approach segment occurs at the published procedure altitude.

→ 3.2 • LAUNCH A REVIEW ON HOW TO RESPOND WHEN ATC DETECT A FLIGHT PATH DEVIATION OR WHEN THEY ARE DOUBTFUL.

Actions have been taken to raise controller awareness, train them and in the use of the MSAW system.


a) Based on RCA 3 § 10.7.1.1.b, the awareness raising (by feedback experience for instance) and recurrent training of controllers is a regular subject during the fortnightly co-ordination meetings between the heads of the regional Air Navigation Services' Operations Departments.

b) In accordance with RCA3 § 2.2.2.3 and as laid down by RCA3 § 2.2.2.3.4, if a dangerous approach to terrain or an artificial obstacle is detected by MSAW, a warning is transmitted to the pilot by the ATC controller who has the aircraft on his frequency.

The phraseology used in this emergency situation is laid down by RCA3 § 3.10.1. It is laid out specifically according to whether the aircraft is under radar control or not.

For more information see the SIA website: (http://www.sia.aviation-civile.gouv.fr/dossier/texteregle/phraseo_chap09_v10.pdf)

c) The review will continue for approaches not covered by an MSAW system.



→ 3.3 • IMPROVE THE AWARENESS OF THE RISKS ASSOCIATED WITH ATC ACTIONS DURING APPROACH.

The DSNA/DO will organise an awareness raising day for their departments in conjunction with the DCS.

Thanks to the mandatory reporting system managed by the DCS, they will be able to provide examples of incidents that stem from ATC actions.

The main themes covered will be:

- recurrency training and raising controller awareness in using system aids (“chevrons”),
- the 250kt speed limit below FL100 whatever the class of airspace,
- surveillance, radar assistance and the risks engendered by changing strategy during the approach phase.

→ 3.4 • IMPROVE THE INITIAL TRAINING AT ENAC AND THE RECURRENT TRAINING OF ATC CONTROLLERS ON UNSTABILISED APPROACHES.

ENAC (the National Civil Aviation School) is designing a training module which will be validated by the DSNA.

The DSNA favours reinforcing controller knowledge during recurrency training rather than during initial training, since the latter already has a high workload and also because this type of training has been shown

to be easier to understand when the controllers already have a certain amount of experience. Action 3.3 will therefore enable a partial response to this requirement.

→ 3.5 • EVALUATE IN A JOINT PILOT/ CONTROLLER WORKING PARTY THE BEST TIME TO CARRY OUT COMMUNICATION HAND-OVERS.

The Director of Air Navigation Services has undertaken to implement this measure in 2008. To be effective and realistic this measure must be carried out on a case by case basis and be implemented within the local pilot/controller committees.

→ 3.6 • INTEGRATE THE SUBJECTS GO AROUND, RADAR UTILISATION AND VISUAL APPROACH IN THE JOINT PILOT/CONTROLLER SAFETY COMMITTEES.

As for Action 3.5, these items will be implemented in the local committees during 2008.



ACTION III

→ 3.7 • EVALUATE WHERE POSSIBLE ESTABLISHING INTERMEDIATE APPROACH SEGMENT AT CLOSE TO 3000 FEET AAL.

The DSNAs has examined the procedures at 107 aerodromes: 552 procedures in total will be modified.

Analysis of Number of Approach Procedures having an intermediate segment at the IAF lower than 3000ft ASFC:

1°) Airfields concerned

- 59 civil airfields with a TWR & APP service
- 13 military airfields (open to CAT)
- 33 airfields with an AFIS
- 2 airfields with Air to Air service

Total : 107 airfields

2°) Procedures with an intermediate segment lower than 1500ft ASFC or very close to 1500ft

- 3 military airfields (open to Public Air Traffic):
Dijon – Reims – Châteaudun
- 7 AFIS airfields:
Blois – Macon – Morlaix – Moulins – Pontivy –
Roanne – La Roche sur Yon
- Civil Airfields with a TWR & APP Service:
Beauvais – Biarritz – Deauville (1520ft) – Cherbourg
(1570ft)

Number of procedures to be revised: 21

3°) Procedures with an intermediate segment lower than 2000ft ASFC or very close to 2000ft

Number of procedures to be revised: 270 (of which 21 with a segment lower than 1500ft)

4°) Procedures with an intermediate segment lower than 2500ft ASFC or very close to 2500ft

Number of procedures to be revised: 405 (270 with a segment lower than 2000ft).

5°) Procedures with an intermediate segment lower than 3000ft ASFC or very close to 3000ft

Number of procedures to be revised: 552 (405 with a segment lower than 2500ft).

TABLE SHOWING NUMBER OF PROCEDURES BY STAGE HEIGHT

S-Segment	Procedures
S < 1500	21
1500 < S < 2000	249
2000 < S < 2500	135
2500 < S < 3000	147

After obtaining the endorsement of the Airspace Directorate, the modifications will be initiated. This represents a significant workload. The DSNAs will prioritise the airfields where the segments are lowest (Beauvais, Cherbourg, Biarritz, Deauville..).

REINFORCE CONTROLLER KNOWLEDGE CONCERNING THE RANGE OF SPEEDS COMPATIBLE WITH AIRCRAFT PERFORMANCE IN RELATION TO EACH SEGMENT OF THE APPROACH PROCEDURE

→ 4.1 • REINFORCE CONTROLLER KNOWLEDGE CONCERNING THE RANGE OF SPEEDS COMPATIBLE WITH AIRCRAFT PERFORMANCE IN RELATION TO EACH SEGMENT OF THE APPROACH PROCEDURE.

ENAC in partnership with the DCS has drawn up according to aircraft performance a draft table of compatibility of speed ranges by type of aircraft and by approach segment.

This draft is currently being reviewed by the DCS and the airlines.

Once it has been reviewed, the DCS will ensure that ENAC's work is distributed and if necessary laid out in the format of the Operations Manuals used by the ATC controllers.



ACTION V

ATC PROCEDURES AND SYSTEMS

→ 5.1 • EXTEND NATIONALLY THE ADOPTION OF THE RADAR SCREEN INTERCEPTION REFERENCE MARKER DEVELOPED AT CDG AND ORY.

The DSNA has deployed the chevrons nationally.

The list of airfields equipped is in the response to Action 3.1.

→ 5.2 • EXTEND THE USE OF MSAW NATIONALLY.

The DSNA intends to extend the deployment of MSAW as shown in the table below.

MSAW DEPLOYMENT PLAN

Airfields already equipped	Lyon – Pau – Nice – Orly – Marseille – Strasbourg – Montpellier – Bâle – Mulhouse – Nantes – Martinique Aimé Cézaire
Deployment planned in 2008	CDG – Pointe à Pitre Le Raizet – Biarritz (being evaluated)
Deployment planned in 2009	Bastia - Ajaccio
Extra deployment decided end 2007 and planned from 2009	Bordeaux – Toulouse – Lille – Clermont – Chambéry – Grenoble

→ 5.3 • ENSURE OBSERVANCE OF THE SPEED LIMIT OF 250KTS BELOW FL100.

Since 2005, an Aeronautical Information Circular (AIC) has limited airspeed to 250kt below FL100.

It is available at the following address:

http://www.sia.aviation-civile.gouv.fr/dossier/aicfrancea/AIC_A_2007_01_FR.pdf

Since 17 July 2008, a directive modifying among other things Appendix 4 of the SCA came into force and makes the 250kt speed limit apply for all classes of airspace. It is available at :

http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=E62F470FD75F336D2005AAAD4DCFB375.tpdj010v_1?cidTexte=JORFTEXT000019309391&dateTexte=&oldAction=rechJO#JORFARTI000019309411

In addition a safety circular has been published on the DGAC website at the following address:

http://www.aviation-civile.gouv.fr/html/actu_gd/info_secu/IS2008_02.pdf

Finally on the 25 March 2008 a letter was sent to the airlines via their administrative boards as well as to the DSNA to remind them to respect the 250kt limit.

Sanctions will possibly be enacted by the DCS if these rules are violated deliberately or repeatedly.

VISUAL APPROACHES

→ 6.1 • DEFINITION OF A VISUAL APPROACH BRIEFING.

The airlines have been asked:

- to hold a briefing whatever the type of approach,
- that a visual approach briefing with key points be included in this,
- that an IFR approach should be favoured over a visual approach at night.

In addition, the DCS in conjunction with the Organisation for Control in Flight and its experts from the Pilot Navigating department have drawn up an outline format for the visual approach.

Implementation of this action will be subject to continued monitoring by the authority.

→ 6.2 • THAT THE AIRLINES DEFINE THEIR OPERATIONAL PARAMETERS UNDER WHICH A FLIGHTCREW CAN REQUEST OR ACCEPT A VISUAL APPROACH.

The response to Action 6.1 fulfils this action.

→ 6.3 • THE DCS AND THE DAC MUST ENSURE THAT THE AIRLINES HAVE A DEFINED BRIEFING FOR ALL TYPES OF APPROACH.

The response to Action 6.1 fulfils this action.

→ 6.4 • ENCOURAGE THE AIRLINES TO CONSIDER ADOPTING THE TERM PILOT MONITORING INSTEAD OF PILOT NOT FLYING.

This action has not yet been taken up.

→ 6.5 • ENCOURAGE THE AIRLINES TO CARRY OUT VISUAL APPROACHES DURING LINE TRAINING.

This action has not yet been subject to formal action by the DCS.

→ 6.6 • AT NIGHT, FAVOUR INSTRUMENT APPROACH PROCEDURES OVER VISUAL APPROACHES.

Since the 1st February 2008, ATC must no longer offer crews a visual approach at night.

In addition the airlines should favour IFR approaches at night over visual approaches (see 6.1).



ACTION VII

UNSTABILISED APPROACH AIRFIELDS

→ 7 • THE AIRLINES ARE INVITED TO INFORM THE DSNA WHICH AIRFIELDS REGISTER A HIGH LEVEL OF UNSTABILISED APPROACHES.

A list of such airfields has been sent to the DSNA by the DCS. Ways of exchanging information between the operators and the DSNA concerning this are being studied by a working group.



GOOD PRACTICE GUIDE

The Good Practice Guide has been completed and is available in French and in English on the Internet.

In French:

http://www.aviation-civile.gouv.fr/html/actu_gd/ans/Les%20documents/Nouveau%20dossier/ANS%20Yannick/Guide%20BP2007.pdf

In English:

http://www.aviation-civile.gouv.fr/html/actu_gd/ans/Les%20documents/Nouveau%20dossier/ANS%20Yannick/traduction%20en%20anglais%20des%20documents%20ANS/Guide%20BP2007GB.pdf

A hard copy version will be sent out to all operators during 2008.



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