



STUDY NOTE

**MEETING OF THE METEOROLOGY PANEL (METP)
WORKING GROUP MOG**

SEVENTH MEETING

Offenbach, Germany, 11 to 13 April 2018

**Agenda Item 6: Matters relating to WAFS
3.2 Other Operational Matters**

REVIEW OF WAFS SIGWX FEEDBACK MECHANISM

(Presented by the WAFS Provider States)

SUMMARY

This Study Note provides the opportunity for the group to review the current guidelines provided to aerodrome meteorological offices in Doc 8896 – *Manual of Aeronautical Practice*, with regards to providing feedback on WAFS SIGWX forecasts.

Action by the METP-WG/MOG is in paragraph 4

1. INTRODUCTION

1.1 This paper provides the opportunity for the group to review and update the guidelines provided to aerodrome meteorological offices regarding the provision of feedback on WAFS SIGWX forecasts.

1.2 The current guidelines are not considered to be generating the most useful type of feedback that the WAFSs would like to receive, and the WAFSs would like to update the guidance contained within Doc-8896 – *Manual of Aeronautical Practice*.

2. DISCUSSION

2.1 It is the view of both WAFSs that the current guidelines given to aerodrome meteorological offices in Doc-8896 Appendix 5, regarding notifying the WAFSs about discrepancies in the SIGWX forecasts, are not generating useful feedback. Most of the feedback being received relates to minor differences in NWP and is received after the SIGWX forecast has been issued. This would not result in a correction being issued.

2.2 The WAFSs propose that the emphasis in Doc-8896 Appendix 5 be changed to gather information on discrepancies between observed or reported weather phenomena and the SIGWX forecasts.

This information would be particularly useful for forecast verification purposes, and can be considered during the preparation of the next set of SIGWX forecasts.

2.3 The WAFCs also propose extending the feedback window, as observed differences between the forecasts and meteorology are most likely to be identified during the validity period of the SIGWX forecast.

2.4 The proposed changes to Doc-8896 are presented in Appendix A.

3. CONCLUSION

3.1 Having considered the revisions to Doc-8896 presented in Appendix A, the WAFCs invite the meeting to consider whether to approve these changes. Accordingly, the group is invited to formulate the following draft action:

Agreed Action 7/xx — Doc 8896 amendment, notifying WAFCs of discrepancies in SIGWX forecasts

That,

a) the METP-WG/MOG accepts the proposed updates to Doc-8896 – *Manual of Aeronautical Practice* as shown in Appendix A;

and

b) the METP-WG/MOG prepares a working paper for METP/4 to enable the necessary changes to Doc-8896 to take place.

4. ACTION BY THE METP-WG/MOG

4.1 The METP-WG/MOG is invited to:

- a) note the information contained in this paper; and
- b) consider the draft action presented in 3.1.

APPENDIX A – PROPOSED CHANGES TO DOC-8896 – *Manual of Aeronautical Practice*

Doc 8896

Chapter 3 “FORECASTS”

3.7 FORECASTS OF EN-ROUTE CONDITIONS

3.7.3 WAFS forecasts of significant en-route weather phenomena

3.7.3.6 In order to assist WAFCs in keeping their SIGWX forecasts under continuous review, it is an important responsibility of aerodrome meteorological offices receiving WAFS forecasts to notify the WAFCs concerned of significant discrepancies between SIGWX forecasts and observed conditions. The notification by aerodrome meteorological offices should be based on the criteria given in Appendix 5 of this manual. Abbreviated plain language should be used in preparing the notification in accordance with the guidance material given in Appendix 5. E-mail ~~or fax messages~~ should be used for transmission of notifications of discrepancies to the relevant WAFc. The WAFc, after receiving such a notification, should acknowledge receipt and make a brief comment including, if necessary, a proposal for follow-up action.

Appendix 5

NOTIFYING WAFCS OF SIGNIFICANT DISCREPANCIES

(See 3.7.3.6)

1. PURPOSE OF THE REPORT

The purpose of the report is to:

- a) enable the aerodrome meteorological offices to inform the WAFCs about significant discrepancies between observed conditions and ~~in~~ SIGWX forecasts issued by WAFCs, in accordance with Annex 3 criteria (see Annex 3, Appendix 2, 2.2); and
- b) report significant discrepancies efficiently and unambiguously.

2. BENEFITS OF THE REPORT

A WAFc benefits from being informed because the report:

- a) provides valuable feedback on the content of the forecasts;
- b) enables forecasters to take feedback into account in future forecasts; and
- c) enables formal review of the quality of WAFc output, if necessary.

3. STEPS TO BE FOLLOWED BY AN AERODROME METEOROLOGICAL OFFICE

The process for notifying a WAFC of significant discrepancies is as follows:

- a) WAFC SIGWX forecast is received by an aerodrome meteorological office;
- b) the aerodrome meteorological office detects a significant discrepancy in accordance with the criteria for the amendment of SIGWX forecasts in Annex 3 (see Annex 3, Appendix 2, 2.2), and no other differences should be reported;
- c) the aerodrome meteorological office describes the significant discrepancy using the following rules:
 - 1) a notification of significant discrepancy concerning a forecast should be sent within 24 hours of the validity period of the forecast if possible. ~~is to be sent between six and nine hours before the commencement of the validity period of the forecast;~~
 - 2) the notification is to be sent only to the WAFC concerned;
 - 3) the notification is to be sent via email ~~or fax~~ using the following e-mail addresses ~~or fax numbers:~~

Centre	Fax number	E-mail address
WAFC Washington	+1 816 880 0652	wifs.admin@noaa.gov
WAFC London	+44 1392 885681	servicedesk@metoffice.gov.uk and sma@metoffice.gov.uk

Note.— Any correspondence with WAFC London to be clearly marked with the following text: "For the attention of WAFC London forecasters."

- 4) the notification of significant discrepancies is to be prepared using the form in the attachment to this appendix;
- 5) the notification is to be written in English.

4. STEPS TO BE FOLLOWED BY A WAFC

The WAFC concerned acknowledges the receipt of the notification of the significant discrepancy to the aerodrome meteorological office that originated it, together with a brief comment ~~thereon and~~ on any action taken. ~~, using the same means of communication employed by the aerodrome meteorological office.~~

ATTACHMENT TO APPENDIX 5

FORM TO BE USED FOR THE NOTIFICATION OF A SIGNIFICANT DISCREPANCY ON SIGNIFICANT WEATHER FORECASTS

FORECAST INVOLVED

Originating WAFC	
ICAO Area	
Flight Level	
Validity Time	
Validity Date	

DESCRIPTION OF THE DISCREPANCY(IES)

Discrepancy Type:	Yes/No
Error in position of forecast phenomena	
Error in intensity of forecast phenomena	
Significant phenomena observed which is not present in the SIGWX forecast	
Other	

Error in expected position or intensity of phenomena; new expected phenomena



Phenomena Type ¹	WAFC Forecast			Proposal Observed phenomena			
	FL	Position	Intensity	FL	Position	Intensity	Reference ²
Turbulence							
Icing							
Cumulonimbus²							
Sandstorms							
Duststorms							
Volcanic activity							
Radioactive material into the atmosphere							
²—Cumulonimbus clouds that are observed, frequent, embedded or occurring at a squall line.							

¹ Hazardous phenomena as specified in Annex 3, Appendix 2, Paragraph 1.3.3.

Note—² The column "Reference" is to specify, for example, the observation, aircraft report or the forecast model field that directed the aerodrome meteorological office to inform of a significant discrepancy. A copy of this information may be added to the form, if necessary.