



International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
**Tenth Meeting of the GREPECAS Aeronautical Meteorology Subgroup
(AERMETSG/10)**
Buenos Aires, Argentina, 19 to 23 October 2009

Agenda Item 2: Implementation of the World Area Forecast System (WAFS)

b) Review of the status of implementation of ISCS

**CURRENT WORK TO FURTHER HARMONIZE ISCS
AND SADIS OPMET DATA**

(Presented by the United States of America)

SUMMARY

This paper highlights the latest efforts to harmonize the International Satellite Communication System (ISCS) and Satellite Distribution System for Information relating to Air Navigation (SADIS). ISCS is now using the SUG annex 1 as the requirements baseline for all Operational Meteorological Data (OPMET).

1. Introduction

1.1 Since last year's meeting, the ISCS Provider State has made several changes to the ISCS data-stream with respect to the OPMET database. First, was eliminating unnecessary re-compilation of Aerodrome Forecast (TAFs) and Meteorological Aviation Routine Weather Reports (METARS) collectives. Another was to use the SUG Annex1 as the requirements builder for the US OPMET data collectives. Lack of resources hindered getting these changes finished earlier.

2. Discussion

2.1 Lack of uniformity

2.1.1 The main reason for the non-uniformity of the two Satellite forecast was in how the two providers issued OPMET collectives. The SADIS provider uses the originating WMO bulletin to include the originating States CCCC where possible. ISCS on the other hand rebuilds other States collectives and re-issues them under the CCCC of KWBC. This procedure by ISCS was updated late last year. Now, METAR/TAF collectives broadcast over ISCS follow the same format as SADIS. The result should be reflected in identical collectives by each provider. For example, if a State sends a collective with OPMET data defined in SUG annex 1, it should appear in both satellite broadcasts.

2.2 Changes to improve harmonization

2.2.1 Changes are also being made to US produced collectives for the ISCS data-stream. Currently some US OPMET is not ICAO compliant (METAR identifiers with numbers) and other bulletins are not Aeronautical Fixed Telecommunication Network (AFTN) compliant (over 1800

characters). Therefore, software changes are being implemented before or by the end of 2009 to ensure the METAR/TAF collectives meet the AFTN requirement of less than 1800 characters and that METAR collectives are ICAO compliant.

2.3 What needs to happen

2.3.1 To address the issues above, the US National Weather Service Tele-Communication Gateway (NWSTG) agreed to make the following changes to US collectives that flow over ISCS this summer. It should be noted, that due to the high volume of US METARs and TAFS, the current US practice is to distinguish collectives very close in time with the RRX component. This is consistent with how the US currently supplies high volume collectives from the US. For example, see the following string of collectives from the collective FTUS71 KWBC, and note the use of the RRX to avoid duplicate entries. **Appendix A** provides a snapshot from the NWSTG detailing multiple collectives from FTUS80 KWBC within the period of a minute, and delineated by the use of RRX.

```
FTUS71 KWBC 111142 RRA
TAF
KGLS 111140Z 1112/1212 18014KT P6SM SCT022
FM111500 18016KT P6SM SCT020 SCT250
```

```
FTUS71 KWBC 111142 RRB
TAF
KLBE 111139Z 1112/1212 00000KT 3SM BR BKN015
FM111400 18006KT 5SM BR BKN030
```

```
FTUS71 KWBC 111142 RRC
TAF
KPIT 111139Z 1112/1218 VRB03KT 2SM BR BKN100
FM111300 17003KT 4SM BR BKN080
```

```
FTUS71 KWBC 111142 RRD
TAF
KSDF 111139Z 1112/1218 18010KT P6SM SCT050
FM111600 22013KT P6SM VCTS BKN035CB
```

```
FTUS71 KWBC 111142 RRE
TAF
PAEN 111139Z 1112/1212 21012KT 6SM BR BKN002
FM111600 21012KT 6SM BR SCT005 BKN015
FM112200 22015G20KT P6SM SCT015 SCT060
```

2.4 **The new collectives to address the issues above**

2.4.1 Annex 1 (**FASID TABLE MET 2A**) is used to define the stations in the new collectives for TAFs, METARs and SPECIALs, which are assigned to different regions of the US. For example:

- Northeastern US...FTUS71, SAUS71 and SPUS71
- Southern US.....FTUS72, SAUS72 and SPUS72
- Central US.....FTUS73, SAUS73 and SPUS73
- Western US.....FTUS74, SAUS74 and SPUS74
- Alaska/Pacific.....FTUS75, SAUS75 and SPUS75

2.5 **What stations are in each new collective?**

2.5.1 See **Appendix B** for the stations in the new collectives. These location IDs are grouped by region in the vertical. **Appendix C** delineates where the regions are in the US.

2.6 **Notification to users**

2.6.1 It should be noted that users of the WAFC workstations received updates discussing the changes mentioned above. Also, the ISCS Program Manager welcomes input from States to identify collectives that are missing on the broadcast. .

3. **Action required**

3.1 The Meeting is invited to note the information in this paper.

APPENDIX A

Database: RTG Reporting

Header	Awips ID	Subscription	Create Date	Last Xmit Change			
FTUS80KWBC		Permitted	04/24/06 10:56:09	05/18/09 19:22:36			
XMIT Line(s) <i>Get Line Descriptions</i>							
50	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:05	121133	RRF	1368
51	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRB	1271
52	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133		1334
53	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRD	1335
54	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRA	1384
55	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRI	1401
56	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRG	1404
57	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRC	1472
58	866	06/12/09 11:33:04	06/12 11:33:04	06/12 11:33:04	121133	RRE	1474
59	866	06/12/09 11:30:07	06/12 11:30:07	06/12 11:30:08	121130	RRB	1428
60	866	06/12/09 11:30:07	06/12 11:30:07	06/12 11:30:08	121130	RRA	1433
61	866	06/12/09 11:30:08	06/12 11:30:08	06/12 11:30:08	121130	RRD	249
62	866	06/12/09 11:30:08	06/12 11:30:08	06/12 11:30:08	121130	RRC	1480
63	866	06/12/09 11:30:07	06/12 11:30:07	06/12 11:30:07	121130		1498
64	866	06/12/09 11:27:05	06/12 11:27:05	06/12 11:27:06	121127	RRL	427
65	866	06/12/09 11:27:05	06/12 11:27:05	06/12 11:27:06	121127	RRL	1294
66	866	06/12/09 11:27:05	06/12 11:27:05	06/12 11:27:06	121127	RRF	1305

Transmission time
 Note multiple FTUS80
 In less than a minute...
 Therefore use of RRX

Character size
 of collective

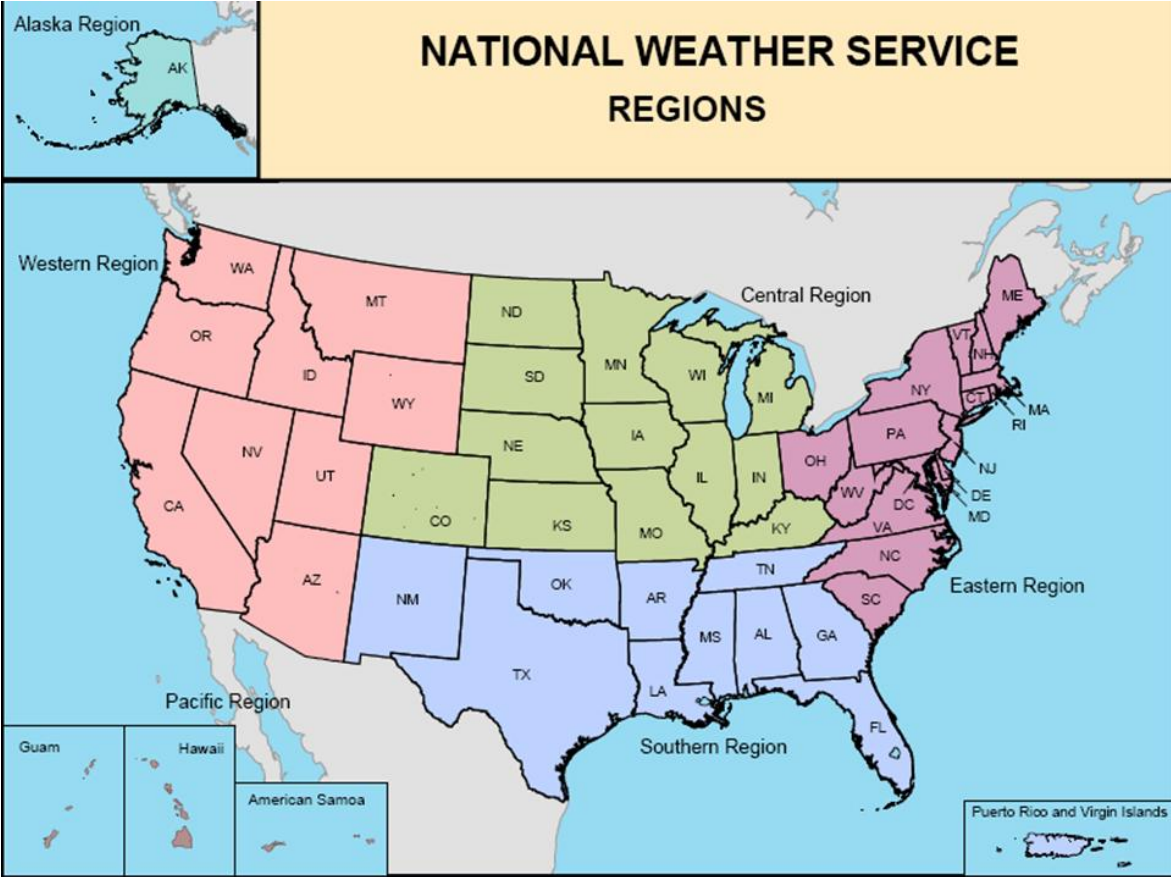
APPENDIX B

These stations are taken from the Annex 1 (FASID TABLE MET 2A) and are grouped by region.

This list of about 450 OPMET locations is the same for the three different types of OPMET collectives listed above.

East FTUS71 SAUS71 SPUS71	East FTUS71 SAUS71 SPUS71	East FTUS71 SAUS71 SPUS71	Southern FTUS72 SAUS72 SPUS72	Southern FTUS72 SAUS72 SPUS72	Southern FTUS72 SAUS72 SPUS72	Central FTUS73 SAUS73 SPUS73	Central FTUS73 SAUS73 SPUS73	Central FTUS73 SAUS73 SPUS73	West FTUS74 SAUS74 SPUS74	West FTUS74 SAUS74 SPUS74	Alaska/Pacific FTUS75 SAUS75 SPUS75
KABE	KEWR	KPQI	KABI	KHOT	KSJT	KABR	KHON	KRST	KACV	KPAE	PABR
KACK	KFAY	KPSM	KABQ	KHOU	KSRQ	KALO	KHUF	KSAW	KALW	KPDX	PABT
KACY	KFLO	KPVD	KABY	KHRL	KSSI	KAFN	KHUT	KSEB	KBFI	KPHX	PACV
KAGC	KGFL	KPWW	KACT	KHRO	KTOC	KASE	KICT	KSDF	KBFL	KPIH	PADL
KAGS	KGON	KRDG	KAEX	KHSV	KTCL	KATY	KIND	KSGF	KBIL	KPMD	PADU
KALB	KGSO	KRDU	KAFW	KIAH	KTCS	KAMN	KINL	KSLN	KBKE	KPRB	PAEN
KAND	KGSP	KRIC	KAHN	KINK	KTLL	KAZO	KJAC	KSPI	KBLL	KPRC	PAGA
KAOO	KHKY	KROA	KALI	KJAN	KTPA	KBFF	KJLN	KSTC	KBOI	KPSP	PAGK
KART	KHPN	KROC	KAMA	KJAX	KTRI	KBIS	KJMS	KSTJ	KBTM	KRBL	PAGY
KAVL	KHTS	KRWI	KANB	KJBR	KTUL	KBUC	KJXN	KSTL	KBUR	KRDD	PAIL
KAVP	KHYA	KSAV	KAPP	KLBB	KTUP	KBRL	KLAN	KSUS	KBYI	KRDM	PAKN
KBAF	KIAD	KSBY	KATL	KLCH	KTXK	KBTL	KLAR	KSUX	KBZN	KRNO	PAKT
KBDL	KIAG	KSLK	KAUS	KLFT	KTYR	KOGI	KLBF	KIVC	KODC	KSAC	PASC
KBDR	KILG	KSWF	KBFM	KLIT	KTVS	KCID	KLEX	KUIN	KCEC	KSAN	PASI
KBFD	KILM	KSYR	KBHM	KLRD	KVCT	KCMD	KLNK	KWRL	KOLM	KSBA	PATA
KBGM	KINT	KTEB	KBNA	KLRU	KVLD	KCMX	KLOZ	KALN	KCTB	KSBB	PAUN
KBGR	KIPT	KTOL	KBPT	KMAF	KVRB	KCOS	KLSE	KBDE	KBKO	KSCK	PAVD
KBRW	KISP	KTTN	KBRO	KMCN	TIIS	KCOU	KMBS	KBKF	KEUG	KSEA	PHJH
KBOS	KJFK	KYNG	KBTR	KMCO	TISX	KCFR	KMCI	KCIU	KFAT	KSFF	PHMK
KBTV	KJST	KZZV	KCHA	KMEI	TJBQ	KCVS	KMDW	KELO	KFLG	KSFO	PMDY
KBUF	KLBE	KAKR	KOLL	KMEM	TJMJ	KDDC	KMHK	KIKK	KGCN	KSHR	
KBWI	KLCK	KAPG	KCNM	KMFE	TJPS	KDEC	KMKC	KIRK	KGEG	KSJC	
KCAE	KLEB	KBED	KCRP	KMGH	TJJS	KDEN	KMKE	KLBL	KGGW	KSLC	
KCAK	KLGA	KBKL	KCSG	KMIA	TKPK	KDET	KMKG	KLOU	KGTF	KSMF	
KCAR	KLUK	KBVY	KCSV	KMKL	TNCM	KDLH	KMLI	KOFF	KHLN	KSMX	
KCHO	KLYH	KCEF	KDAB	KMLB	KBQK	KDSM	KMOT	KSDM	KHQM	KSNA	
KCHS	KMDT	KEWB	KDAL	KMLC	KCEW	KDTW	KMSN	KSTP	KIDA	KSNS	
KCKB	KMFD	KFRG	KDFW	KMLU	KDLF	KEAU	KMSP	KYIP	KIWA	KTUS	
KCLE	KMGW	KFVE	KDHN	KMOB	KESF	KEGE	KOMA		KLAS	KTVL	
KCLT	KMHT	KHFD	KDMN	KMSL	KNEW	KEVV	KORD		KLAY	KTWF	
KCMH	KMIV	KHVN	KELP	KMSY	KNGP	KFAR	KOSH		KLGB	KUKI	
KCRW	KMRB	KLWM	KEYW	KOKC		KFNT	KOTM		KLMT	KYKM	
KCVG	KMSS	KMMU	KFLL	KPBI		KFSD	KOWB		KLVM	KYUM	
KDAN	KMTN	KNKT	KFSM	KPDK		KFWA	KPAH		KMFR	KCXL	
KDAY	KMYR	KOQU	KFTW	KPFN		KGCK	KPIA		KMLS	KMYV	
KDCA	KORF	KPLB	KFTY	KPIE		KGFK	KPIR		KMRV	KNTD	
KDUJ	KORH	KSCH	KGGG	KPNS		KGJT	KPLN		KMSO	KRNT	
KECG	KPHF	KUCA	KGLS	KROW		KGRB	KPTK		KOAK	KSBD	
KEHN	KPHL	KWRI	KGNV	KRSW		KGRI	KPUB		KOGD	KTIW	
KELM	KPIT		KGPT	KSAT		KGRR	KRAP		KOLM		
KERI	KPKB		KGUP	KSFB		KGYV	KRFD		KONT		
KEWN	KPOU		KGWO	KSHV		KHIB	KRKS		KOTH		

APPENDIX C



- END -