



OSCC.DEC/10/15
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OSCC+
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Open Skies Consultative Commission

3rd Meeting of the 67th Session

OSCC(67) Journal No. 221, Agenda item 3(a)

**DECISION No. 10/15
REVISION ONE OF OSCC DECISION No. 6/11 ON
OPEN SKIES FORMAT 40 ON TECHNICAL INFORMATION ON
DIGITAL VIDEO CAMERAS INSTALLED ON
DESIGNATED AIRCRAFT**

The Open Skies Consultative Commission pursuant to the provisions of the Treaty on Open Skies and OSCC Decision No. 8/15, has decided to adopt the new version of the Open Skies Format 40 on technical information on digital video cameras installed on designated aircraft, as attached to this decision.

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Decided in Vienna, in the Open Skies Consultative Commission, on 22 June 2015, in each of the six languages specified in Article XIX of the Treaty on Open Skies, all texts being equally authentic.

OS FORMAT 40

PRECEDENCE:

FROM:

TO: ALL STATES PARTIES

INFO:

SUBJECT: TECHNICAL INFORMATION ON DIGITAL VIDEO CAMERAS INSTALLED ON DESIGNATED AIRCRAFT

1. OS MESSAGE NUMBER:
2. OS MESSAGE DATE AND TIME:
3. TREATY REFERENCE: ARTICLE IV, PARAGRAPH 10; ANNEX B, SECTION I
4. MESSAGE REFERENCE (OS FORMAT 8 MUST ACCOMPANY THIS FORMAT):
5. CONTENT
 - A. INFORMATION ON FRAMING VIDEO CAMERAS
 - (1) SENSOR TYPE (FRAMING)/MANUFACTURER NAME/MODEL:
 - (a) INFORMATION ON DETECTOR ARRAYS
 - (i) TOTAL NUMBER OF DETECTOR ARRAYS IN SENSOR:
 - (ii) DETECTOR ARRAY DESIGNATION OR DESIGNATIONS:
 - (aa) SIZE OF INDIVIDUAL DETECTOR ELEMENTS (PIXELS), IN MICROMETRES
 - (aaa) LENGTH:
 - (bbb) WIDTH:
 - (bb) ARRANGEMENT OF DETECTOR ELEMENTS WITHIN THE DETECTOR ARRAY, IN PIXELS
 - (aaa) ARRAY LENGTH:
 - (bbb) ARRAY WIDTH:
 - (cc) DIMENSION OF DETECTOR ARRAY, IN MILLIMETRES
 - (aaa) ARRAY LENGTH:
 - (bbb) ARRAY WIDTH:
 - (iii) ETC., FOR EACH DETECTOR ARRAY DESIGNATION HAVING DIFFERENT CHARACTERISTICS
 - (b) SPECTRAL INFORMATION FOR EACH DETECTOR ARRAY DESIGNATION
 - (i) DETECTOR ARRAY DESIGNATION OR DESIGNATIONS ASSOCIATED WITH SPECTRAL INFORMATION (IN ACCORDANCE WITH DOCUMENTATION PROVIDED BY THE MANUFACTURER):
 - (aa) COLOR DESIGNATION:
 - (aaa) CENTRAL WAVELENGTH IN NANOMETRES:
 - (bbb) MINIMUM WAVELENGTH MEASURED AT THE -3DB POWER POINT IN NANOMETRES:

(ccc) MAXIMUM WAVELENGTH MEASURED AT THE -3DB POWER POINT IN NANOMETRES:

(ddd) FILTER DESIGNATION

1) FILTER NAME:

2) INSTALLATION METHOD: (INTERNAL OR EXTERNAL)

3) SPECTRAL CHARACTERISTICS OF EXTERNALLY INSTALLED FILTER (IF APPLICABLE)

A) WAVELENGTH OF THE CUTTING FILTER IN NANOMETRES: (IF APPLICABLE)

B) WAVELENGTH OF ADJUSTING FILTER IN NANOMETRES (IF APPLICABLE)

i) MINIMUM TRANSMITTANCE WAVELENGTH MEASURED AT -3DB:

ii) MAXIMUM TRANSMITTANCE WAVELENGTH MEASURED AT -3DB:

iii) CENTRAL WAVELENGTH:

C) GRAY FILTER FACTOR: (IF APPLICABLE)

(eee) ETC., FOR EACH FILTER

(bb) ETC., FOR EACH DIFFERENT COLOR DESIGNATION, AS APPLICABLE

(ii) ETC., FOR EACH DETECTOR ARRAY DESIGNATION

(c) INFORMATION ON VIDEO CAMERA LENS

(i) TOTAL NUMBER OF LENS DESIGNATIONS FOR SENSOR:

(ii) LENS DESIGNATION AND CHARACTERISTIC:

(aa) MANUFACTURER / MODEL:

(bb) FIELD OF VIEW OR SCAN ANGLE IN DEGREES:

(cc) RELATIVE APERTURE

(aaa) MAXIMUM:

(bbb) MINIMUM:

(ccc) DISCRETE VALUE(S) (IF APPLICABLE)

1) VALUE:

2) ETC., FOR EACH VALUE

(dd) MAXIMUM FOCAL LENGTH IN MILLIMETRES:

(ee) SHUTTER SPEED (IF APPLICABLE)

(aaa) MINIMUM SHUTTER SPEED (SEC):

(bbb) MAXIMUM SHUTTER SPEED (SEC):

(ff) RESOLVING POWER AT A CONTRAST RATIO OF 1000 TO 1 OR THE EQUIVALENT MODULATION OF 1.0, AT THE MAXIMUM RELATIVE APERTURE, IN LINE PAIRS PER MILLIMETRE (IN ACCORDANCE WITH DOCUMENTATION PROVIDED BY THE MANUFACTURER):

- (gg) DETECTOR ARRAY DESIGNATION ASSOCIATED WITH LENS:
 - (aaa) NUMBER OF DETECTOR ARRAYS ASSOCIATED WITH LENS:
 - (bbb) LOCATION OF CENTER OF DETECTOR ARRAY, MEASURED AS A TWO-DIMENSIONAL, 4 QUADRANT, POSITION RELATIVE TO LENS OPTICAL AXIS IN DEGREE BY DEGREE:
 - (ccc) ETC. FOR EACH DETECTOR ARRAY HAVING DIFFERENT INSTALLATION
 - (hh) ETC., FOR EACH DIFFERENT DESIGNATION OF DETECTOR ARRAYS ASSOCIATED WITH THE LENS
- (iii) ETC., FOR EACH DIFFERENT LENS DESIGNATION
- (d) INFORMATION ON DIGITAL SAMPLING
 - (i) SAMPLING CONFIGURATION DESIGNATION:
 - (aa) MINIMUM FRAME RATE IN FRAMES PER SECOND: (IF APPLICABLE)
 - (bb) MAXIMUM FRAME RATE IN FRAMES PER SECOND:
 - (cc) DEPTH IN BITS:
 - (ii) ETC., FOR EACH DIFFERENT SAMPLING CONFIGURATION
- (e) OPEN SKIES DIGITAL IMAGERY PRODUCTS INTENDED TO BE CERTIFIED
 - (i) IMAGE DESIGNATION:
 - (aa) FIELD OF VIEW OR SCAN ANGLE
 - (aaa) ACROSS THE FLIGHT PATH IN DEGREES:
 - (bbb) ALONG THE FLIGHT PATH IN DEGREES: (IF APPLICABLE)
 - (bb) IMAGE LENS (ES)
 - (aaa) LENS DESIGNATION:
 - 1) NUMBER OF LENSES:
 - 2) OPTICAL AXIS POINTING VECTOR MEASURED AS A TWO-DIMENSIONAL, 4 QUADRANT, POSITION RELATIVE TO SENSORS CENTRAL OR NORMAL AXIS IN DEGREE BY DEGREE:
 - 3) ETC., FOR EACH LENS
 - (bbb) ETC., FOR EACH DIFFERENT LENS DESIGNATION
 - (cc) EFFECTIVE FOCAL LENGTH IN PIXELS OR MILLIMETRES:
 - (dd) IMAGE DIMENSIONS
 - (aaa) MAXIMUM NUMBER OF PIXELS ACROSS THE FLIGHT PATH:
 - (bbb) MAXIMUM NUMBER OF PIXELS ALONG THE FLIGHT PATH:
 - (ee) DETECTOR ARRAY DESIGNATION OR DESIGNATIONS ASSOCIATED WITH IMAGE DESIGNATION:
 - (ff) NUMBER OF SPECTRAL BANDS:
 - (gg) NUMBER OF BITS PER PIXEL PER SPECTRAL BAND:

- (hh) MAXIMUM OSDDEF IMAGE FILE SIZE IN BYTES:
- (ii) FOR PANSHARPENED OR COLOUR IMAGES
 - (aaa) COLOR DESIGNATION:
 - (bbb) ETC., FOR EACH COLOR DESIGNATION
- (ii) ETC., FOR EACH DIFFERENT IMAGE DESIGNATION
- (f) INFORMATION ON HARDWARE FOR PRE-PROCESSING THE VIDEO SIGNAL AND GENERATION OF PRIMARY SIGNAL DATA
 - (i) MANUFACTURER NAME / MODEL:
 - (ii) HARDWARE VERSION:
- (g) INFORMATION ON SOFTWARE FOR PRE-PROCESSING OF THE VIDEO SIGNAL AND GENERATION OF PRIMARY SIGNAL DATA (IF APPLICABLE)
 - (i) SOFTWARE NAME / VERSION:
 - (ii) ETC., FOR EACH SOFTWARE PRODUCT
- (h) INFORMATION ON HARDWARE AND/OR SOFTWARE FOR PROCESSING OF THE ORIGINAL DATA AND GENERATION OF DIGITAL IMAGERY PRODUCT (IF APPLICABLE)
 - (i) HARDWARE AND/OR SOFTWARE NAME / VERSION:
 - (ii) ETC., FOR EACH HARDWARE AND/OR SOFTWARE PRODUCT
- (i) INFORMATION ON HARDWARE AND/OR SOFTWARE FOR PROCESSING OF THE DIGITAL IMAGERY PRODUCT AND GENERATION OF THE OPEN SKIES DIGITAL IMAGERY PRODUCT
 - (i) SOFTWARE AND/OR HARDWARE NAME / VERSION:
 - (ii) ETC., FOR EACH SOFTWARE AND/OR HARDWARE PRODUCT
- (j) INFORMATION ON RECORDING EQUIPMENT
 - (i) FOR RECORDINGS ON MAGNETIC TAPE
 - (aa) TYPE OF DATA RECORDING EQUIPMENT:
 - (bb) MAXIMUM DATA RECORDING RATE IN FRAMES PER SECOND FOR FRAMING SYSTEMS OR MEGABYTES PER SECOND FOR DIGITAL SYSTEMS:
 - (cc) VIDEO BANDWIDTH IN MEGAHERTZ:
 - (ii) FOR DIGITAL RECORDINGS ON OTHER THAN MAGNETIC TAPE
 - (aa) TYPE, USER INTERFACE, AND FILE SYSTEM FORMAT OF DATA RECORDING EQUIPMENT:
 - (bb) MAXIMUM DATA RECORDING RATE IN MEGABYTES PER SECOND:
- (k) INFORMATION ON EQUIPMENT FOR MEASURING AIRCRAFT MOTION DATA USED FOR IMAGING (IF APPLICABLE)
 - (i) TYPE AND MODEL OF EQUIPMENT: (TYPE/MODEL)
 - (aa) FREQUENCY OF MEASUREMENT IN KILOHERTZ:
 - (ii) ETC., FOR EACH EQUIPMENT TYPE AS APPLICABLE
- (l) INFORMATION ON SENSOR INSTALLATION
 - (i) SENSOR INSTALLATION:

- (aa) SENSOR MOUNT DESIGNATION:
 - (aaa) DESCRIPTION:
 - (bb) ANGLES OF DEVIATION OF THE SENSOR MOUNT, MEASURED LEFT OR RIGHT, RELATIVE THE AIRCRAFT VERTICAL AXIS IN DEGREES:
 - (cc) SENSOR WINDOW DESIGNATION FOR THE WINDOW ASSOCIATED WITH THE SENSOR MOUNT:
 - (aaa) DESCRIPTION:
 - (ii) ETC. FOR EACH SENSOR INSTALLATION
 - (m) [INFORMATION ON SENSOR CONFIGURATION DISABLING:
 - (i) CONFIGURATION DISABLING DESIGNATION:
 - (aaa) DESCRIPTION OF DISABLING METHOD:
 - (bbb) SENSOR CONFIGURATION ASSOCIATED WITH THE DISABLING DESIGNATION:
 - (ii) ETC. FOR EACH CONFIGURATION DISABLING DESIGNATION]
 - (2) ETC., FOR EACH FRAMING VIDEO CAMERA
- B. FOR SENSORS THAT ARE CERTIFIED AFTER 1 JANUARY 2006, AND THAT RECORD INITIALLY IN ANALOGUE FORMAT
- (1) TYPE AND MODEL OF HARDWARE USED TO DIGITIZE ANALOGUE DATA: (TYPE/MODEL)
 - (2) NAME/VERSION OF SOFTWARE USED TO DIGITIZE ANALOGUE DATA:
 - (a) SAMPLING RATE OF ANALOGUE TO DIGITAL CONVERTER:
 - (b) NUMBER OF BITS PER PIXEL PER SPECTRAL BAND:
- C. DESCRIPTION OF SENSOR CONFIGURATION
- (1) CONFIGURATION NUMBER:
 - (a) SENSOR TYPE/MANUFACTURER NAME/MODEL:
 - (b) IMAGE DESIGNATION:
 - (c) HARDWARE FOR PRE-PROCESSING THE VIDEO SIGNAL AND GENERATION OF PRIMARY SIGNAL DATA MANUFACTURER NAME/MODEL/VERSION:
 - (d) SOFTWARE FOR PRE-PROCESSING OF THE VIDEO SIGNAL AND GENERATION OF PRIMARY SIGNAL DATA (IF APPLICABLE)
 - (i) NAME/VERSION:
 - (ii) ETC.
 - (e) HARDWARE AND/OR SOFTWARE FOR PROCESSING OF THE ORIGINAL DATA AND GENERATION OF DIGITAL IMAGERY PRODUCT (IF APPLICABLE)
 - (i) NAME/VERSION:
 - (ii) ETC.
 - (f) HARDWARE AND/OR SOFTWARE FOR PROCESSING OF THE DIGITAL IMAGERY PRODUCT AND GENERATION OF THE OPEN SKIES DIGITAL IMAGERY PRODUCT
 - (i) NAME/VERSION:
 - (ii) ETC.
 - (g) DIGITAL SAMPLING CONFIGURATION DESIGNATION:

- (h) TYPE, USER INTERFACE, AND FILE SYSTEM FORMAT OF DATA RECORDING EQUIPMENT:
 - (i) INFORMATION ON EQUIPMENT FOR MEASURING AIRCRAFT MOTION DATA USED FOR IMAGING (IF APPLICABLE)
 - (i) TYPE AND MODEL OF EQUIPMENT: (TYPE/MODEL)
 - (ii) ETC., FOR EACH EQUIPMENT TYPE AS APPLICABLE:
 - (j) HARDWARE/SOFTWARE USED TO DIGITIZE ANALOGUE DATA (IF APPLICABLE):
 - (k) TYPE AND MODEL OF EQUIPMENT USED TO RECORD ANALOGUE DATA: (TYPE/MODEL) (IF APPLICABLE)
 - (l) SENSOR INSTALLATION:
 - (m) CONFIGURATION DISABLING DESIGNATION (IF APPLICABLE):
- (2) ETC., FOR EACH CONFIGURATION NUMBER:
6. REMARKS:
7. END OF OS MESSAGE NUMBER: