

From: Matus, Bob [Bob.Matus@Sensis.com]
Sent: Wednesday, February 01, 2006 11:18 AM
To: Dennis.J.Baley@faa.gov
Cc: John Kennedy
Subject: RE: MSP Items

John Kennedy at the FCC has requested I forward this attached information to you regarding the Sensis MDS system at Detroit Metropolitan Airport. Please let me know what questions you have regarding this information.

Call me with any questions.

Thanks.

Bob Matus
315-634-3030

-----Original Message-----

From: Dennis.J.Baley@faa.gov [mailto:Dennis.J.Baley@faa.gov]
Sent: Tuesday, January 31, 2006 5:00 PM
To: Matus, Bob
Subject: RE: MSP Items

Bob,
I checked with our spectrum specialist and he indicated that he hadn't received a response yet on the licensing. I will make the calls tomorrow to whomever he's working with and come back to you with (hopefully) a time table for the approval.

Sorry for the delay

dennis

"Matus, Bob"

<Bob.Matus@Sensis

.com>

To

Dennis J Baley/AGL/FAA@FAA

01/31/2006 12:12

cc

PM

Subject

RE: MSP Items

Anything new in regards to the approval letters, Dennis?

-----Original Message-----

From: Dennis.J.Baley@faa.gov [mailto:Dennis.J.Baley@faa.gov]

Sent: Wednesday, January 18, 2006 10:35 AM

To: Matus, Bob

Subject: Re: MSP Items

Bob,

I did receive the ground inspection from Pat. I will be generating a letter for Ken, announcing the approval to operate. What I'm waiting on

for both MSP and DTW is a final concurrence from our headquarters on the vehicle usage. An email came out late last week implying that the FAA "may" go along with the vehicle transmitters..... but it was never officially announced. I haven't had time to chase this down yet it's been one of those weeks.....

I have a note to ask our spectrum specialist for a formal approval. With that..... I'll be able to write into the approval letters that vehicle squitters are allowed.

More to come

dennis

"Matus, Bob"

<Bob.Matus@Sensi

To S.com>
Dennis J Baley/AGL/FAA@FAA
01/18/2006 09:11
cc AM
Subject MSP Items

Dennis:

Good morning. I just wanted to follow-up on our telephone call of last week. In regards to the site inspection of our equipment, at MSP, on the glide slopes, I spoke to Pat McCormick who stated the inspection was completed and he would forward an e-mail to you to say such. Please let me know if that is in fact completed.

Also, have you had a chance to check with the FCC on the licensing issue we discussed?

Finally, have you mailed the 7460s and approval letter to Ken Rogers for DTW?

Thank you for the updates.

Bob Matus
Sensis Corporation
Air Traffic Systems
Program Manager
(w) 315-634-3030
(c) 315-409-9041

Detroit (DTW)

Call Sign:

FAA Regional NGT #:

0072-EX-PL-2005

WD2XOC

Unassigned

	RefTran	RU1	RU2	RU3	RU4	RU5	RU6	RU7	RU8	RU9	RU10	RU11	RU12	RU13
DTW Airport Location	Ref/Tran Building 715	ATCT Tower Bldg 801	Mesaba Hanger Bldg 425	County Tower Bldg 530	NWA Hanger 514	ASR-9 Bldg 925	NWA Hanger 715	RTR 'A' Bldg 931	RTR 'J' Bldg 950	MALSR Bldg	McNamara South Bldg 830	Westin South	Westin North	Smith A Terminal Bldg 603
Unit Type:	RefTran	RO	RT	RO	RT	RO	RO	RT	RO	RO	RO	RO	RO	RO
Peak envelope power (PEP)	ERP = 188.300000 W; Avg Power = .0000067kW	0kW	ERP = 188.300000 W; Avg Power = .0002754kW	0kW	ERP = 188.300000 W; Avg Power = .0002754kW	0kW	0kW	ERP = 188.300000 W; Avg Power = .0002754kW	0kW	0kW	0kW	0kW	0kW	0kW
Type of antenna	Omni- Directional AS 177; Co-linear array	Sector - Variable Pattern Directional	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Sector - Variable Pattern Directional	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array	Omni- Directional AS 177; Co-linear array
Transmit antenna gain;	2.8 dBi	6-9 dBi	2.8 dBi	2.8 dBi	2.8 dBi	2.8 dBi	2.8 dBi	6-9 dBi	2.8 dBi	2.8 dBi	2.8 dBi	2.8 dBi	2.8 dBi	2.8 dBi
AMSL - elevation above sea level of the antenna site;	713	817	679	764	711	700	718	686	695	637	689	735	738	661
Height above ground of the focal point of the antenna;	733	829	691	776	726	712	728	698	695	637	701	750	750	673
Antenna polarization;	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical	Verical
The azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.;	Omni-Directional	270 degrees	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	270 degrees	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional	Omni-Directional
Pulse repetition rate (PRR) that the equipment is capable of operating on to include PRR stagger sequences if appropriate, whether the PRR is adjustable and what PRR's the equipment can accept, and any other information that would be helpful in understanding the pulse characteristics of the equipment;	1030 MHz: PRR = 1.1 cycles per second	Receive Only	1090 MHz: 45 cycles per second	Receive Only	1090 MHz: 1.1 cycles per second	Receive Only	Receive Only	1090 MHz: 45 cycles per second	Receive Only	Receive Only	Receive Only	Receive Only	Receive Only	Receive Only
Pulse width	32.5uS	Receive Only	32.5uS	Receive Only	32.5uS	Receive Only	Receive Only	32.5uS	Receive Only	Receive Only	Receive Only	Receive Only	32.5uS	32.5uS
Equipment nomenclatures;	RU - Remote Unit; RT - Receive/Transmit; RO - Receive Only; RX/RefTran - Reference Transponder													
Whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking;	Sensis ATCRBS (mode 3) interrogations cannot be blanked out in certain azimuths or regions. The Mode S interrogations, however, can be configured to only interrogate targets in specific regions. But, due to the use of non-moving omni antennas, even if Mode S interrogation regions are configured, aircraft in other non-interrogated areas may still detect the MDS interrogation signals.													
Radius of operations if appropriate;	Worst case transmit power is for communicating at 25 nautical miles. Antennas are spaced within 2 nautical miles at DTW and the power adjusted downward for this range. (reference 7460 and 6050)													
Detailed description of the proposed operation to include any technical parameters that will be altered during operations.	Attached is the letter submitted to the FAA 2/25/2005													

	RefTran	RU1	RU2	RU3	RU4	RU5	RU6	RU7	RU8	RU9	RU10	RU11	RU12	RU13
DTW Airport Location	Ref/Tran Building 715	ATCT Tower Bldg 801	Mesaba Hanger Bldg 425	County Tower Bldg 530	NWA Hanger 514	ASR-9 Bldg 925	NWA Hanger 715	RTR 'A' Bldg 931	RTR 'J' Bldg 950	MALSR Bldg	McNamara South Bldg 830	Westin South	Westin North	Smith A Terminal Bldg 603
Will interrogations (transmissions) be made on 1090 MHz as well as 1030 MHz (airborne transponders typically only transmit on 1090 MHz and receive on 1030 MHz)?	MLAT Interrogations are only done on 1030 MHz. We listen at 1090 MHz for the aircraft transponder transmissions (Mode 3/A and Mode S).													
If transmissions will be made on 1030 MHz, in what modes of operation will the transmitter operate (Modes 1, 2, 3A, 3C, 4, 5, Mode-S)? Is this a TCAS and is TCAS the only reason why the 1030 MHz transmissions are needed (airborne Mode 4 and/or 5 operations will be very difficult if not impossible to authorize and airborne Mode-S is not authorized)?	Sensis MLAT equipment interrogates Mode 3 (ATCRBS targets for Mode A & Mode C information) and Mode S.													
To whom is this product being sold (is this confined to overseas customers or US customers)?	Product is owned by Sensis Corporation and leased to Northwest Airlines.- US customer													
Does the waveform meet all of the required ICAO Annex 10 requirements and appropriate RTCA Document?	Yes.													