

ATTACHMENT 3

RESPONSE TO FCC FORM 312, QUESTION 43

Pursuant to Section 25.118(a)(2) of the Commission's rules, Honeywell International Inc. ("Honeywell") hereby provides notice to the FCC of a minor modification to its Title III authorization to provide certain Inmarsat services to customers in the United States.¹

Honeywell is currently authorized to provide the Inmarsat D service over a total of 25,000 mobile earth terminals ("METs"), model numbers JUE-610 DT, DMR-200, SAT 101, SAT-201, SAT-200/202, SAT-232, SAT-242, and SAT-401. By this filing, Honeywell provides notice to the FCC of a variant of its SAT-401 MET, which was approved by the Commission for inclusion under Call Sign E020074 on April 29, 2015, the TAM-401. The TAM-401 has four models: TAM-412, TAM-442, TAM-412-C1D2, and TAM-442-C1D2. There are several differences among the models: (i) the TAM-412 and TAM-442 are intended for use in standard conditions, while TAM-412-C1D2 and TAM-442-C1D2 are intended for use in hazardous conditions; (ii) the TAM-412 and TAM-412-C1D2 are non-rechargeable, while the TAM-442 and TAM-442-C1D2 are rechargeable; (iii) the TAM-412 and TAM-412-C1D2 have one LED light to indicate modem status, while the TAM-442 and TAM-442-C1D2 have two LED lights to indicate both modem and battery charging status; and (iv) they have different product labelling consistent with the foregoing.

The TAM-401 is manufactured by Honeywell Global Tracking Ltd. Honeywell anticipates shipping the first TAM-401 METs to the United States in December 2015, subject to customer requirements.

Under Section 25.118(a)(2) of the Commission's rules, the new model TAM-401 can be added to Honeywell's authorization by filing a Notification of Minor Modification within 30 days of the modification. Specifically, 47 C.F.R. § 25.118(a)(2) provides:

Except for replacement of equipment where the new equipment is electrically identical to the existing equipment, an authorized earth station licensee may add, change or replace transmitters or antenna facilities without prior authorization, provided:

- (i) The added, changed, or replaced facilities conform to § 25.209;
- (ii) The particulars of operations remain unchanged;
- (iii) Frequency coordination is not required; and

¹ See Honeywell International Inc., Call Sign E020074, IBFS File No. SAT-MOD-10111125-01400 (Jan. 9, 2012). The authorization was held previously by LXE Inc. See FCC, Satellite Communications Services Information: Actions Taken, *Public Notice*, Report No. SES-01753 (May 27, 2015) (reporting a May 26, 2015 approval of the consent to assignment Call Sign E020074 from LXE Inc. to Honeywell International Inc.).

(iv) The maximum power and power density delivered into any antenna at the earth station site shall not exceed the values calculated by subtracting the maximum antenna gain specified in the license from the maximum authorized e.i.r.p. and e.i.r.p. density values.

As set forth in the accompanying materials and engineering certificate, the TAM-401 fulfills the same functions and meets equivalent technical specifications as the SAT-401 and therefore meets the Section 25.118(a)(2) criteria. Section 25.209 of the rules is not applicable to mobile satellite services. Because the TAM-401 consists of four models with the same radiofrequency as the approved SAT-401, the particulars of operation of the terminal remain unchanged from the SAT-401, and frequency coordination is not required for the use of the TAM-401. The maximum allowable EIRP under the E020074 authorization is 9 dBW, and the input power at the antenna flange for the TAM-401 is 1 W (0 dBW), well within the parameters of 47 C.F.R. § 118(a)(2)(iv).

Honeywell is **not** seeking to increase the overall number of terminals that it is authorized for; rather, it will use the TAM-401 terminal as part of the 25,000 terminals for which it is already authorized. In addition, the new MET model number TAM-401 complies with all the terms and conditions of Honeywell's authorization], including the requirement of having an average shut-down time of 1.35 seconds and maximum shut-down time of 2.6 seconds (condition 3920) in order to protect the Global Maritime Distress and Safety Service ("GMDSS"). Because the TAM-401 is not intended for Ship Security Alert Systems ("SSAS") services or long range identification and tracking ("LRIT") uses, it does not need to meet IMO SSAS and LRIT requirements.

Honeywell Global Tracking Ltd., formerly known as EMS Global Tracking Ltd., offers Inmarsat-D services, which include both the D+ and IsatM2M modes of operation.² Honeywell Global Tracking is a subsidiary of Honeywell, which acquired control over it in a transaction approved by the Bureau in August 2011.³ Inmarsat D is a low data-rate, two-way store and forward short messaging and tracking system. Inmarsat-D provides low cost satellite communications for such applications as asset tracking and SCADA. Honeywell Global

² The difference in the two modes of operation is that the IsatM2M mode is capable of longer messages and reduced messaging latency. As a result, there is a difference in the receive modulation for those Inmarsat-D terminals that are capable of operating in the IsatM2M mode. See Honeywell International Inc., Call Sign E020074, IBFS File No. SES-MOD-20071107-01542 (Mar. 3, 2008). As originally authorized, the license was limited to only the D+ mode of operation. However, after changes implemented by Inmarsat to its network of satellites and corresponding modulation changes requested to its authorization, Honeywell is now authorized to operate in either mode of the Inmarsat-D service.

³ See FCC, Satellite Communications Services Information: Actions Taken, *Public Notice*, Report No. SES-01374 (Aug. 17, 2011) (reporting an August 15, 2011 approval of the indirect transfer of control over LXE's earth station authorization to Honeywell International Inc.).

Tracking Ltd. provides essential services to government customers, such as the U.S. Coast Guard and the U.S. Navy in connection with their homeland security efforts (e.g., surveillance and warnings for terrorist hijackings of marine vessels), and to private sector customers to track their assets and to monitor sensitive energy facilities, including natural gas well heads, pipelines, shipping containers and service vehicles. The new model TAM-401 adds to the choices and flexibility Honeywell Global Tracking is able to offer its customers.

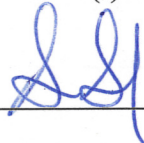


Engineering Certificate

I hereby certify that I am Senior Engineering Manager for Honeywell Global Tracking Ltd. and that the Honeywell Global Tracking mobile earth terminal ("MET") model number TAM-401 (which has four models: TAM-412, TAM-442, TAM-412-C1D2, and TAM-442-C1D2) complies with all applicable Part 25 rules and the terms and conditions of the E020074 blanket authorization to provide the Inmarsat-D (D+ and IsatM2M modes) service to customers in the United States. *See Call Sign E020074.*

MET model number TAM-401 is electrically equivalent in terms of its underlying RF characteristics to the SAT-401 MET that is already included in the E020074 authorization. In addition, the TAM-401 MET complies with all terms and conditions of the E020074 authorization, including the requirement of having an average shut-down time of 1.35 seconds and maximum shut-down time of 2.6 seconds (Condition 3920) in order to protect the Global Maritime Distress and Safety Service ("GMDSS").

Attached to this certification is a report including a technical specification sheet for model number TAM-401 and a test report demonstrating the compliance of the MET with the FCC's out-of-band emissions requirements, 47 C.F.R. §§ 25.202(f) and 25.216.

By: _____

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Title: Senior Engineering Manager,
Honeywell Global Tracking Ltd.

Dated: 30th October 2015