

08 May, 2000

Mr. Frank Coperich  
FCC Application Processing Branch

**Re: Questions from the FCC**

**FCC ID:** NVA010164-005A  
**Correspondence Reference Number:** 13122  
**731 Confirmation Number** EA96661  
**Date of Original E-Mail:** 03/30/2000

Dear Mr. Coperich:

Pursuant to your e-mail to our Jay Sarkar, I am forwarding to you our response to item 1. Item 2 has been addressed by an update to the warning in the product's manual. The relevant portions of the FCC's e-mail follow with our response inserted in the appropriate place:

```
> -----Original Message-----  
> To: Jay Sarkar, jsarkar@aprel.com  
> From: Frank Coperich, fcoperic@fcc.gov  
> FCC Application Processing Branch  
>  
> Re: FCC ID NVA010164-005A  
> Applicant: Hypercom Corporation  
> Correspondence Reference Number: 13122  
> 731 Confirmation Number: EA96661  
> Date of Original E-Mail: 03/30/2000  
>  
>  
> 1. This is a Point of Sales handheld terminal. They did SAR  
> at extreme conditions and extrapolate back to determine a  
> minimum separation distance for satisfying SAR compliance. A  
> minimum separation distance of 0.5 cm for the hand and 1.1 cm  
> for the body were determined in the SAR report. The manual  
> indicated a 3 cm separation but the SAR report recommends 6  
> mm, please confirm 3 cm is the final number used for the  
> separation distance.
```

Testing was performed on two versions of this unit, the CDPD version referenced here, and the Mobitex version (FCC ID NVA010164-004, 731 Confirmation Number EA96756). The largest separation for compliance was determined for the Mobitex unit and to be conservative, rounded up to 3cm. Since the same manual is being used for both products the more severe

restriction determined for the Mobitex version will be applied to both versions, and will be used in the Warning (see below).

> 2. The proposed warning statement is unclear - "put the side  
> of the terminal near the antenna and above the credit card  
> slot less than 3 cm from .....". The 6-minute time averaging  
> factor is only applicable to controlled exposure environment,  
> it does not apply to this device. Please revise accordingly  
> and re-submit relevant pages of the manual; suggestion -  
> "WARNING: To comply with FCC RF exposure requirements, this  
> unit must be operated with a minimum separation distance of 3  
> cm (1-1/8 inches) between its antenna and a person's body.  
> The user's hand should not be placed directly next to the  
> antenna or at locations on the unit where the antenna is  
> connected, to ensure compliance with FCC RF exposure limits.

The following warning is in the revised device manual (uploaded as a separate document with this response)

**WARNING:**

To comply with FCC RF exposure requirements, the CDPD or Mobitex units must be operated with a minimum separation distance of 3 cm (1-1/8 inches) between its antenna and a person's body. The user's hand should not be placed next to the antenna or at locations on the unit where the antenna is connected. A minimum separation distance of 1.5 cm is needed to ensure compliance with FCC RF exposure limits for the hand.