



International Consortium For Telemetry Spectrum

Long-Distance Cordless Phones Threat Update

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**Meeting of the European Telemetry Conference 2002
Garmisch Germany, 30 May 2002**



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Long-Distance Cordless Phones

- ⊕ **Latest/Hottest Thing on the Wireless Market:**
 - **Looks/Acts like a Regular Cordless Phone Except:**
 - **Power from Base/Handheld Units Amplified.**
 - **900 milliwatts for Base & Handheld = 3-5 Kilo. Range.**
 - **These Phones (Sony, Nokia, Engenius, Panasonic, etc.) Operate in the 900 & 2450 MHz “Part 15” Bands.**
- ⊕ **Selling Points: Performs Like A Cellular Phone But No Cellular Bills Since It Is Connected to an Existing Telephone Line. No Cellular Phone Infrastructure Needed.**

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Illegal Long-Distance Cordless Phones

- ⊕ **50 Watts for Base + 15 Watts for Handheld = 70-80 km!**
- ⊕ **They Operate In Sacred Bands !!**
 - **130 - 136 MHz: Commercial Air Traffic Control.**
 - **138 - 174 MHz: Primary Land Mobile/3 Meter Ham Band.**
 - **225 - 400 MHz: NATO/Air Traffic Control, Comm/Data Links, SATCOM, SINCGARS, Telemetry, etc.**
- ⊕ **China is Manufacturing/Exporting Them!!!**
 - **At Least 16 Manufacturers Producing 36 Models.**
 - **Some Dealers Claim Taiwan Produces But They Deny It.**
 - **No Country of Origin on Boxes or FCC Certification/ID #.**
- ⊕ **They Are Being Imported/Sold/Used Worldwide Right Now!!**

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Some Dealers and Their Websites

- ⊕ www.4cellular.com (268 & 394 MHz)
- ⊕ www.cordlessmart.com (249 & 375 MHz)
- ⊕ www.extremorange.com
- ⊕ <http://customelectronics.tripod.com>
- ⊕ www.ancocom.com (253, 254, 379 & 380 MHz)
- ⊕ www.senao.com (264 & 390 MHz)
- ⊕ www.nordsudtt.com (220-280 & 340-400 MHz)

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Dealer “Disclaimers...”

- ⊕ “Not FCC Certified, May Not Be Used In USA.”
- ⊕ “Not FCC for USA. Signature Required For Use.”
- ⊕ “Please note some models do not have FCC US, DOC Canada approval and may be against the regulations of certain countries.”
- ⊕ “If you intend to use this phone in the United States, you may want to check on local FCC laws.”
- ⊕ “Not approved for use in US or Canada because the FCC saves these frequencies for special use. Also if you have a neighbor in between the base and remote site, you could cause interference on their TV or cause their pager to beep when you get phone calls.”

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Dealer “Disclaimers...”Continued

- ⊕ “It is the buyer’s responsibility to ensure that the items they purchase are acceptable in their community and that you are (!?) infringing on any local standards (FCC) or laws.”
- ⊕ “This phone by law can not be used or shipped into areas where communist governments restrict the use of security features in communications devices.”
- ⊕ “All other questions on issues of law are NOT to be directed to us. If you feel you will be in conflict with the laws, codes registers, statutes, regulations, rules or prohibited thought

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crimes of your nation. DO NOT BUY THIS ITEM. We are
not responsible for the illegal use of this product.”



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Illegal Cordless Phones on eBay

- ⊕ **Discovered Vendors Peddling On Internet Auction Sites.**
- ⊕ **Chased Off Some With Reasoning, Cajolery & Naked Threats.**
- ⊕ **eBay Declared New Cordless Phones Standards (MAR 2002):**

“ Unauthorized long-range cordless telephones may interfere with frequencies of authorized users and aeronautical communications. All cordless phones listed for sale on **eBay must be authorized by the FCC.”**

- ⊕ **By Requiring Sellers To Post The FCC ID Number, These Listings Came to a Halt Almost Immediately.**

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Implications

- ⊕ **If Used By Ignorant/Unscrupulous Consumers They **WILL** Wreak Havoc With ATC/NATO/HAM Systems/Networks.**
- ⊕ **Will Be Difficult to DF/Identify:**
 - **Mobile/Infrequent Usage/Unassigned/Unlicensed.**
 - **Capable of Secure Voice/Coding/Scrambling.**
- ⊕ **Known Victims To Date:**
 - **Federal Aviation Administration: Cleveland & Miami ATC**
 - **International Civil Aviation Organization**
 - **Amateur Radio Relay League: 70cm, 1.2m & 2m bands.**
 - **US DoD: 13 FEB 2002 @ NAS Miramar ATC (380.81 MHz).**
 - **US Coast Guard & **China** Too!**

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Solutions?

⊕ National Coordination:

- **US GOV Coordination: FCC, FAA, DoD, CG, Customs, etc.**
- **TV/Public Service Announcements/Newspaper Articles.**
- **FAA Issues SITREP of 29 June 2001.**
- **Confiscate Equipment & Issue Citations/Fines/Forfeitures.**
- **US DoD/FAA Meeting with FCC Enforcement Bureau.**

⊕ International Coordination:

- **FAA/Bahamian Government Investigation/Mitigation Plan.**
- **International NOTAM Issued by ICOA.**
- **Exchange with Manufacturers: Cases, Units/Models Listed.**
- **Asian/Pacific Meetings: State Aviation Agencies, Telecom Ministries, Customs.**

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