

Indiana RACES Standards and Protocols

The Standards and Protocol committee has reached a consensus on some basic capabilities that each RACES Team should have in order to insure interoperability between the State RACES Team and the County RACES Teams; and just as importantly, between counties.

While the committee will never have 100% agreement among all Hams about any topic, they believe all stakeholders have had an opportunity to voice their suggestions/ concerns. Furthermore, having an agreed upon set of standards, albeit imperfect, is a huge improvement over having 93 or more different standards.

The committee recognizes that these standards will not remain unchanging. It is important that we constantly review the tools we have at our disposal and make intelligent modifications, testing new ideas, discarding unsuccessful ideas.

There was very little dissention on approximately 97% of the original proposal. I am pleased to accept the recommendations with some very minor modifications.

The types are:

HF Voice
HF Sound-card digital
HF TNC-based digital
VHF/UHF Voice
VHF/UHF Digital
Internet Protocols
Other Tools

2008 Indiana RACES - Current Standards and Protocol

HF Voice:

SSB on approx 3.920 and 7.290 MHz and 60 Meters (see notes below)

HF Sound-card digital

PSK31 and HF Packet.

Olivia and/or MT63 (modes with FEC) – Plan to use mid to second half of 2008 (see notes below)

VHF/UHF Voice

FM, with locally-defined (and published!) repeater and simplex frequencies.

VHF/UHF Digital

Packet and/or APRS using the existing network.

Expansion of the existing network to extend coverage - Plan to use mid to second half of 2008

Internet protocols

1 - EchoLink, IRLP

Other Tools

12v DC Power Supply Connectors

1 - 30 Amp Red/Black Anderson Powerpole (PP 30 Series, ARRL/ARES standard)

60 Meter notes: While the committee recognize many HF radios do not presently have this capability and that the "channelized nature" of this band requires some different procedures than other bands. However, the committee feels very strongly that 60 Meters is a tool RACES should have at our disposal in the future. It will compliment our ability to utilize HF on a regional basis by filling the propagation gap between 80 Meters and 40 Meters. While it may be several years before we have widespread capabilities on this band, the sooner we start building this capability, the sooner it will be a reality. This is a recommendation for all NEW equipment. Teams should not abandon equipment that does not have this capability. Specialized procedures will be developed and published as part of the "Standard Operating Procedures" Project to follow.

HF Packet Note: While PSK31 is a more widely used mode on HF, it was felt that something with error correction was needed at this time for use in transmitting lists of names or addresses or equipment where an error on one letter or number could considerable confusion or delay.

Potential Future Indiana RACES - Standards and Protocol

HF Voice:

Digital voice modes: DRMDV, FDMDV, AOR

HF Sound-card digital

The progress of sound-card ARQ modes FLDIGI and ALE-400 should be tracked for possible future use.

HF TNC-based digital

A plan needs to be developed for future integration into the HF digital network.

VHF/UHF Voice

D-Star and/or Project 25 Note that both require proprietary codecs, but a USB hardware codec will soon be available to make the cost of a mostly-software- based D-Star system within reach. (The chip in the USB dongle will also support the AOR protocol used on HF).

VHF/UHF Digital

4 - D-Star

Internet protocols

Hinternet

File authentication and compression.

PGP (Pretty Good Protection) under consideration.