

# ALE

## Automatic Link Establishment

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# What is ALE?

- Automatic Link Establishment
- Used with/on HF frequencies
  - propagation
  - interference
  - monitoring the static
- Standard for establishing and maintaining a connection between stations
- Provides for rapid and reliable way to make contact with another station

# How does ALE work?

- List of channels is scanned as a receiver listens for soundings transmitted by other stations
- Station occasionally transmits its own soundings for others to hear
- Records of which stations are heard are stored
- Operator enters Address (callsign) of station being called
- Equipment alerts operator to incoming call

# Channels Examples

from: [hflink.com](http://hflink.com)

CH NAME	FREQ kHz	BAND	DESCRIPTION	USAGE	NET ADDR
01AHFN	1843.0	160m	International	Data/Voice	HFN
03AHFN	3596.0	80m	Primary International	Data	HFN
05AHFN	5357.0	60m	Primary International	Data	HFN
07AHFN	7102.0	40m	Primary International	Data	HFN
10AHFN	10145.5	30m	Primary International	Data	HFN
14AHFN	14109.0	20m	Primary International	Data	HFN
18AHFN	18106.0	17m	Primary International	Data	HFN
21AHFN	21096.0	15m	Primary International	Data	HFN
28AHFN	28146.0	10m	Primary International	Data	HFN

# Channels Examples

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CH NAME	FREQ kHz	BAND	DESCRIPTION	USAGE	NET ADDR
01BHFL	1996.0	160m	International	Voice	HFL
03BHFL	3791.0	80m	International	Voice	HFL
05BHFL	5360.0	60m	International	Voice	HFL
07BHFL	7185.5	40m	International	Voice	HFL
14BHFL	14346.0	20m	International	Voice	HFL
18BHFL	18117.5	17m	International	Voice	HFL
21BHFL	21432.5	15m	International	Voice	HFL
28BHFL	28312.5	10m	International	Voice	HFL

# Channels Examples

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CH NAME	FREQ kHz	BAND	DESCRIPTION	USAGE	NET ADDR
03CHFL	3996.0	80	Regional	Voice	HFL
05CHFL	5371.5	60	Regional	Voice	HFL
07CHFL	7296.0	40	Regional	Voice	HFL

# Equipment

- HF SSB radio
  - Some better than others
  - Homebrew some solutions (interfaces)
- Controller (or computer)
  - Built in
  - Standalone
- Antenna
  - Broadband/no tuner
  - With tuner, special cases

# Video / More Info

- Quick Start Guide to ALE
  - <https://www.youtube.com/watch?v=y4USt8JFUHE>
- Websites
  - <http://hflink.com/> and <http://hflink.net/>
  - <http://oh8stn.org/blog/2017/08/18/ale-automatic-link-establishment-start/>
  - Wikipedia has some additional good info



# Questions about ALE

