

D-Star

An Introduction to the JARL
standard for Digital Voice and
Digital Data on VHF/UHF/Above



What is D-STAR

- Digital Smart Technologies for Amateur Radio
 - 1999 Funded by the Japanese Government and administered by the Japanese Amateur Radio League (JARL)
 - 2001 Open Specification Published – anyone can implement <http://www.arrl.org/FandES/field/regulations/techchar/D-STAR.pdf>
 - Current Implementations
 - Digital Voice (with simultaneous low rate data) on 2 meters
 - Digital Voice (with simultaneous low rate data) on 70 centimeters
 - Digital Voice (with simultaneous low rate data) on 23 centimeters
 - Digital Data (128Kbps) on 23 centimeters
 - Backbone (10 Mbps) on 10 GHz. band
 - Internet Gateways

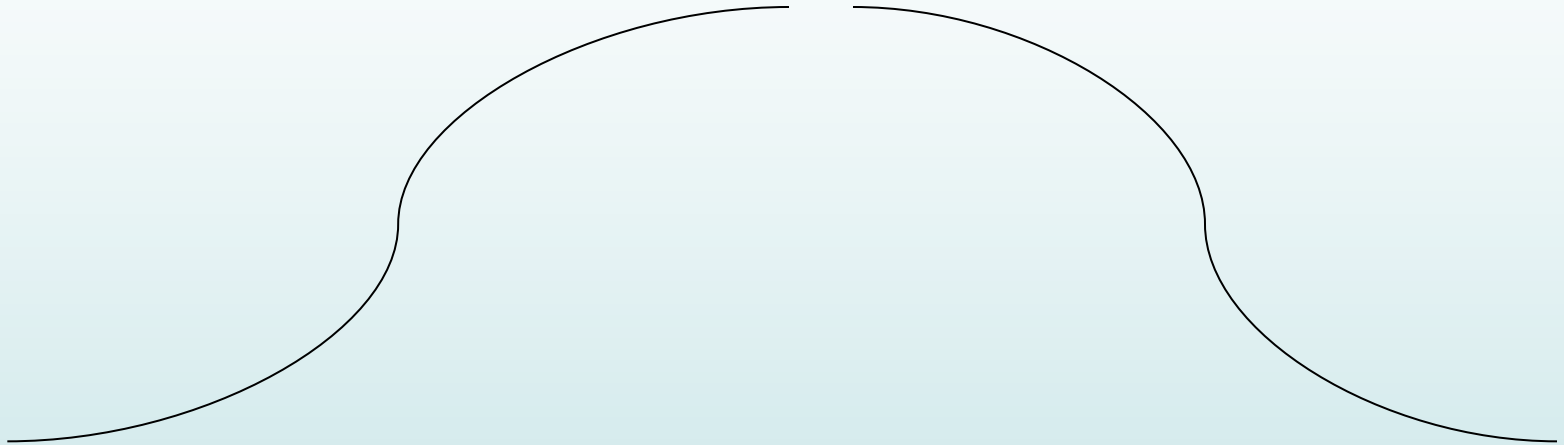


Making a Contact: Simplex

- General Call
 - Your Call: **CQCQCQ**
 - RPT1:
 - RPT2:
 - My Call: SM3EFS
- Specific Station
 - Your Call: **SM3LDP**
 - RPT1:
 - RPT2:
 - My Call: SM3EFS
- General Call
 - Calling CQ
 - Roundtables/Nets
 - Most Common
- Specific Station
 - When other station is using callsign squelch



Making a Contact: Simplex



70 CM
UR: CQCQCQ
RPT1:
RPT2:
MY: SM3EFS



70 CM
UR: CQCQCQ
RPT1:
RPT2:
MY: SM3LDP



Making a Contact: Local Repeater

- General Call
 - Your Call: **CQCQCQ**
 - RPT1: **SK3BG B**
 - RPT2:
 - My Call: SM3EFS
- Specific Station
 - Your Call: **SM3LDP**
 - RPT1: **SK3BG B**
 - RPT2:
 - My Call: SM3EFS
- General Call
 - Calling CQ
 - Roundtables/Nets
 - Most Common
- Specific Station
 - Calling specific Station



Lokal Repeater



70 CM
UR: CQCQCQ
RPT1: SK3BG B
RPT2:
MY: SM3EFS



70 CM
UR: CQCQCQ
RPT1: SK3BG B
RPT2:
MY: SM3LDP

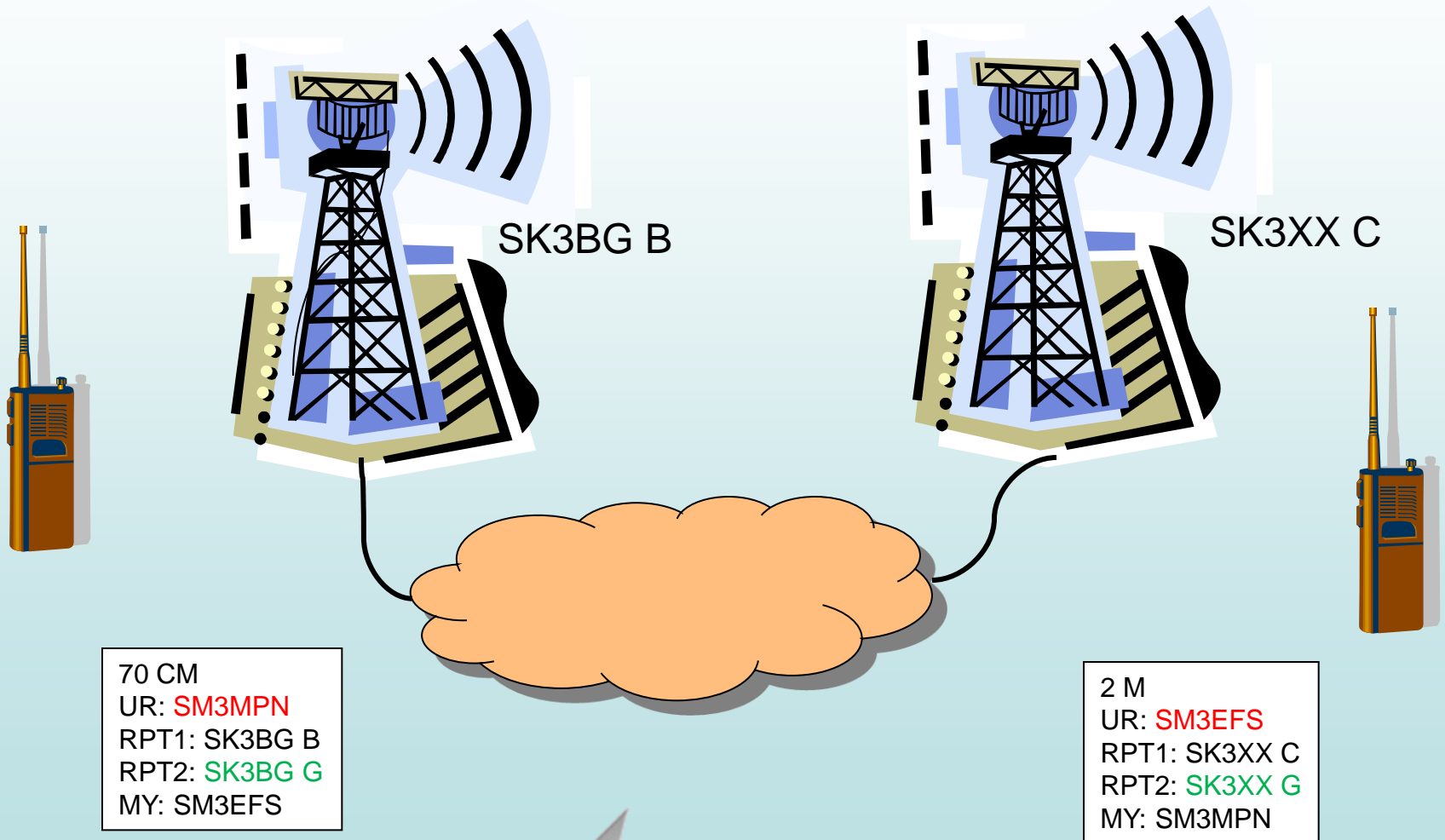


Anrop via Gateway

- General Call
 - Your Call: **CQCQCQ**
 - RPT1: SK3BG B
 - RPT2: **SK3BG G**
 - My Call: SM3EFS
- Specific Station
 - Your Call: **SM3MPN**
 - RPT1: SK3BG B
 - RPT2: **SK3BG G**
 - My Call: SM3EFS
- General Call Through Gateway
 - Calling CQ
- Specific Station Through Gateway
 - Calling specific Station
 - Don't need to know other station's location (City, Repeater, Freq., ...)



Anrop via Gateway



Anrop via Reflector

- General Call
 - Your Call: **CQCQCQ**
 - RPT1: SK3BG B
 - RPT2: **SK3BG G**
 - My Call: SM3EFS
- General Call Through Gateway
 - Calling CQ
 - **Multiple stations in QSO**
- Specific Station
 - Your Call: **SM3MPN**
 - RPT1: SK3BG B
 - RPT2: **SK3BG G**
 - My Call: SM3EFS
- Specific Station Through Gateway
 - Calling specific Station
 - Don't need to know other station's location (City, Repeater, Freq., ...)



DCS010 reflector

