

ISS CROSSBAND REPEATER OPERATIONS PLAN

Location: Hamma Hamma Cabin, WA
Grid Square: CN87
Callsign: KF7AZV
Radios: Anytone D578UVIII (Mobile) / D878 (HT)

1. Doppler Shift Channel Programming

Channel Name	RX Freq (Downlink)	TX Freq (Uplink)	TX Tone (CTCSS)	Pass Phase
ISS 1 (AOS)	437.810 MHz	145.990 MHz	67.0 Hz	Horizon approach
ISS 2	437.805 MHz	145.990 MHz	67.0 Hz	Mid-rise
ISS 3 (TCA)	437.800 MHz	145.990 MHz	67.0 Hz	Overhead (Peak)
ISS 4	437.795 MHz	145.990 MHz	67.0 Hz	Mid-descent
ISS 5 (LOS)	437.790 MHz	145.990 MHz	67.0 Hz	Horizon departure

2. Operating Notes

- **Bandwidth:** Set all five channels to Wide (25 kHz) FM.
- **Squelch:** Open completely (set to 0) to hear signals emerge from the static.
- **Tracking:** Start on ISS 1. Step down to ISS 2, 3, etc., as the signal distorts.
- **QSO Format:** Keep it fast. "KF7AZV, CN87."

3. Pass Schedule (Sep 16 - 25)

Date	Start	Max Elevation	End	Duration	Viability / Notes
16 Sep	19:56:16	51° NNW	20:02:52	6m 36s	Outside trip dates
16 Sep	21:33:32	41° N	21:36:33	3m 01s	Outside trip dates
17 Sep	20:45:51	39° N	20:50:42	4m 51s	Outside trip dates
17 Sep	22:22:49	16° WNW	22:23:39	0m 50s	Outside trip dates
18 Sep	19:58:08	40° N	20:04:34	6m 26s	NO - ARISS spacewalk outage
18 Sep	21:35:12	43° NNW	21:37:47	2m 35s	NO - ARISS spacewalk outage
19 Sep	20:47:34	46° N	20:51:54	4m 20s	YES - Good secondary option
19 Sep	22:24:24	13° WNW	22:24:51	0m 27s	NO - Too low (13° max)
20 Sep	19:59:53	41° N	20:06:02	6m 09s	YES - Workable, brief clear window

Date	Start	Max Elevation	End	Duration	Viability / Notes
20 Sep	21:36:45	38° WNW	21:38:58	2m 13s	MARGINAL - West mountains may clip
21 Sep	20:49:05	72° NNE	20:53:07	4m 02s	YES (PRIMARY) - Best elevation/clearance
22 Sep	20:01:26	56° NNE	20:07:17	5m 51s	Outside trip dates
22 Sep	21:38:21	26° W	21:40:13	1m 52s	Outside trip dates / Too low
23 Sep	20:50:34	57° SSW	20:54:25	3m 51s	Outside trip dates
24 Sep	20:02:52	83° SSW	20:08:40	5m 48s	Outside trip dates
24 Sep	21:40:25	15° WSW	21:41:37	1m 12s	Outside trip dates / Too low
25 Sep	20:52:16	25° SW	20:55:55	3m 39s	Outside trip dates / Too low