



HAM RADIO DELUXE SOFTWARE

The Radio Amateur's Best Asset

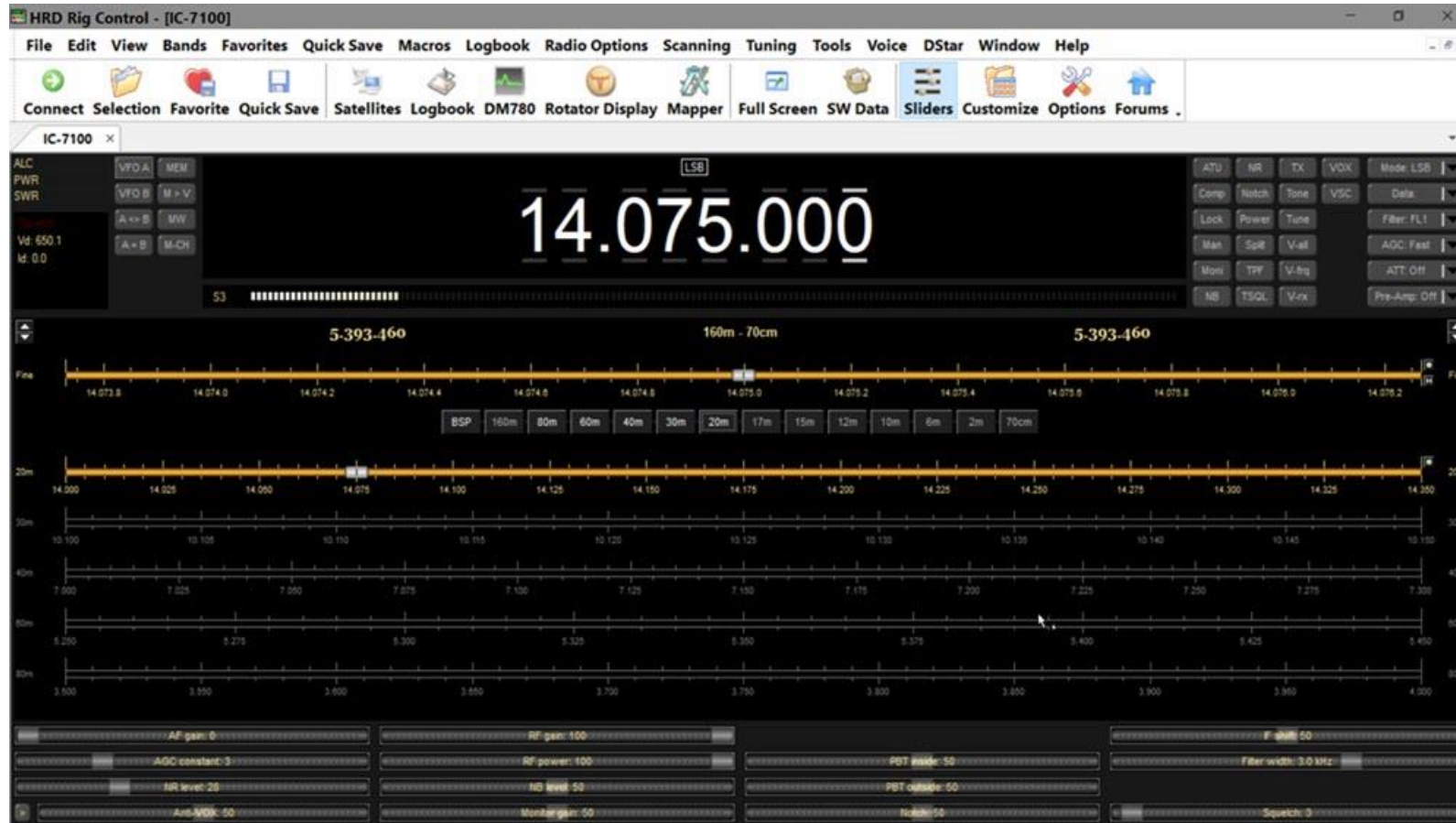
Dr. Michael Carper, WA9PIE

Co-Owner, HRD Software, LLC

Overview of Presentation

- Quick Product Overview
- 2017 in Review
- Company Changes
- Support and Development Processes
- Approach for On-going Development
- Roadmap
- Follow and Interact With Us (Newsletter, blog, etc)
- Q&A

Quick Product Overview – Rig Control



Quick Product Overview - Logbook

HRD Logbook - [My Logbook]

File Edit View Browser Calendar Countries Logbook Tools Window Help

Open Layout A Layout B Satellite Tracking Rig Control Digital Master Rotator Tune-Main Tune-Sub Add Manager About Home Configure Full Screen **WA9PIE** **10.146.100** **3.780.000**

Lookup My Logbook Award Tracking

QRZ.com Logbook Reset Spot Callsign: **TF2MSN**

30m modes
Bands
Modes [PSK31]
Licensee
Odinn Thor
Akranes
TF2MSN@internet.is
HP84xh
64.315837°, -22.044864°
3.728 miles, 31°
EU-021
Country
Iceland
DXCC=242, Cont=EU
64.71°, -18.53°
30m modes
Bands
10m,12m,15m,17m,20m,80m
Modes [PSK31]
CW,USB,RTTY
IOTA

QSO date	Time on	Call	Mode	Sent	Rcvd	Band	Name	Country	LOTW received	LOTW sent
3/30/2017	16:47:48	5T2AI	USB	599	599	12m	Al-Ghanim (9K2AI)	Mauritania	Verified (Match)	Yes
3/30/2017	16:42:52	J5UAP	CW	599	599	12m	Peter Brucker	Guinea-Bissau	No	Yes
3/23/2017	03:13:03	3V8SS	CW	599	599	80m	Radio Club Station Of Tunisian Scouts	Tunisia	Verified (Match)	Yes
3/23/2017	02:21:59	T2AQ	USB	599	599	17m	Jacek Marczewski	Tuvalu	Verified (Match)	Yes
3/22/2017	01:15:11	PJ2/DL1RMT	CW	599	599	40m	Bernd ' Ben ' Maronde	Curacao Is.	No	Yes
3/22/2017	01:03:15	S01WS	CW	599	599	80m	Sahrawi Amateur Radio Union URS	Western Sahara	No	Yes
3/20/2017	05:31:16	EA9/DL7DF	CW	599	599	160m	Siegfried Presch	Ceuta & Melilla	Verified (Match)	Yes
3/20/2017	05:25:34	SU5R	CW	599	599	160m	by Tifariti Gang	Niger	No	Yes
3/19/2017	02:48:02	MJ5Z	CW	599	599	40m	Kazunori Watanabe	Jersey	Verified (Match)	Yes
3/19/2017	02:20:08	MJ5Z	CW	599	599	80m	Kazunori Watanabe	Jersey	Verified (Match)	Yes
3/18/2017	22:35:31	YT3X	CW	589	599	20m	Miki Jakovljevic	Serbia	No	Yes
3/18/2017	22:33:57	VE5MX	CW	599	599	20m	Einar Todd Bendtssen	Canada	Verified (Match)	Yes
3/13/2017	00:15:19	9G5X	CW	59	59	80m	Ghana Dxpedition	Ghana	Verified (Match)	Yes
2/4/2017	02:07:41	UK9AA	CW	599	559	160m	FEDOR	Uzbekistan	No	Yes
1/26/2017	03:36:11	LZ1KFM	CW	599	569	160m	Radio Club ,Milara International'	Bulgaria	No	Yes
1/24/2017	04:49:21	TU5MH	CW	599	599	40m	DX EXPEDITION 2017	Cote d'Ivoire	Verified (Match)	Yes
1/24/2017	04:22:01	TU5MH	CW	599	599	30m	DX EXPEDITION 2017	Cote d'Ivoire	Verified (Match)	Yes
1/13/2017	06:01:41	SV9BAI	CW	599	599	80m	GIANNIS GALANAKIS	Crete	No	Yes

DX Cluster: Spots: WA9PIE-10 on WA9PIE-2 (DXSpider)

C	B	M	L	Time	Freq	DX	Call	Country (ARRL Prefix)	DX	CQ	DX	ITU	Comment	Spotter
✓	×	✓	✓	0320Z	144.225.0	N5RAK	United States (K)		4	7	EM20FJ<>EM14HO	59	SSB TNX	K5IM
✓	×	✓	✓	0208Z	181.035.0	ZL1LC	New Zealand (ZL)		32	60	FN31OV<>RF73		JT65	W1AER
✓	×	✓	✓	0138Z	50.039.8	C6AFP/B	Bahamas (C6)		8	11	559			NW0W
✓	×	✓	✓	0138Z	10.146.1	TF2MSN	Iceland (TF)		40	17	RTTY Heard in MD			W3LPL
✓	×	✓	✓	0137Z	10.142.0	TF2MSN	Iceland (TF)		40	17	RTTY Heard in MD			W3LPL
✓	×	✓	✓	0127Z	50.039.8	C6AFP/B	Bahamas (C6)		8	11	EN82LN<ES>FL16		559	K8JA
✓	×	✓	✓	0115Z	50.039.7	C6AFP/B	Bahamas (C6)		8	11				NW0W
✓	×	✓	✓	0106Z	10.117.1	TF3JB	Iceland (TF)		40	17	TNX Jnas,		73 Rick	N1NSE
✓	×	✓	✓	0047Z	10.117.0	TF3JB	Iceland (TF)		40	17	559 in OK but building			KC0OW
✓	×	✓	✓	0047Z	10.117.0	TF3JB	Iceland (TF)		40	17				N4NQ
✓	×	✓	✓	0030Z	10.116.9	TF3JB	Iceland (TF)		40	17	simplex 56 SC			N4IQ
✓	×	✓	✓	0025Z	50.276.0	TF3ML	Iceland (TF)		40	17	JT65 Tnx QSO			K5XI
✓	×	✓	✓	0020Z	10.117.0	TF3JB	Iceland (TF)		40	17	559 my wire			NJ1T
✓	×	✓	✓	0018Z	10.117.0	TF3JB	Iceland (TF)		40	17	Heard in MD			W3LPL
✓	×	✓	✓	0011Z	7.057.1	HZ1TT	Saudi Arabia (HZ)		21	39	RTTY Heard in MD			W3LPL

30 Day Solar Data Solar Cycle Progression Audio Monitor DX Cluster: Spots: WA9PIE-10 on WA9PIE-2 (DXSpider)

Ready

Quick Product Overview – Digital Modes

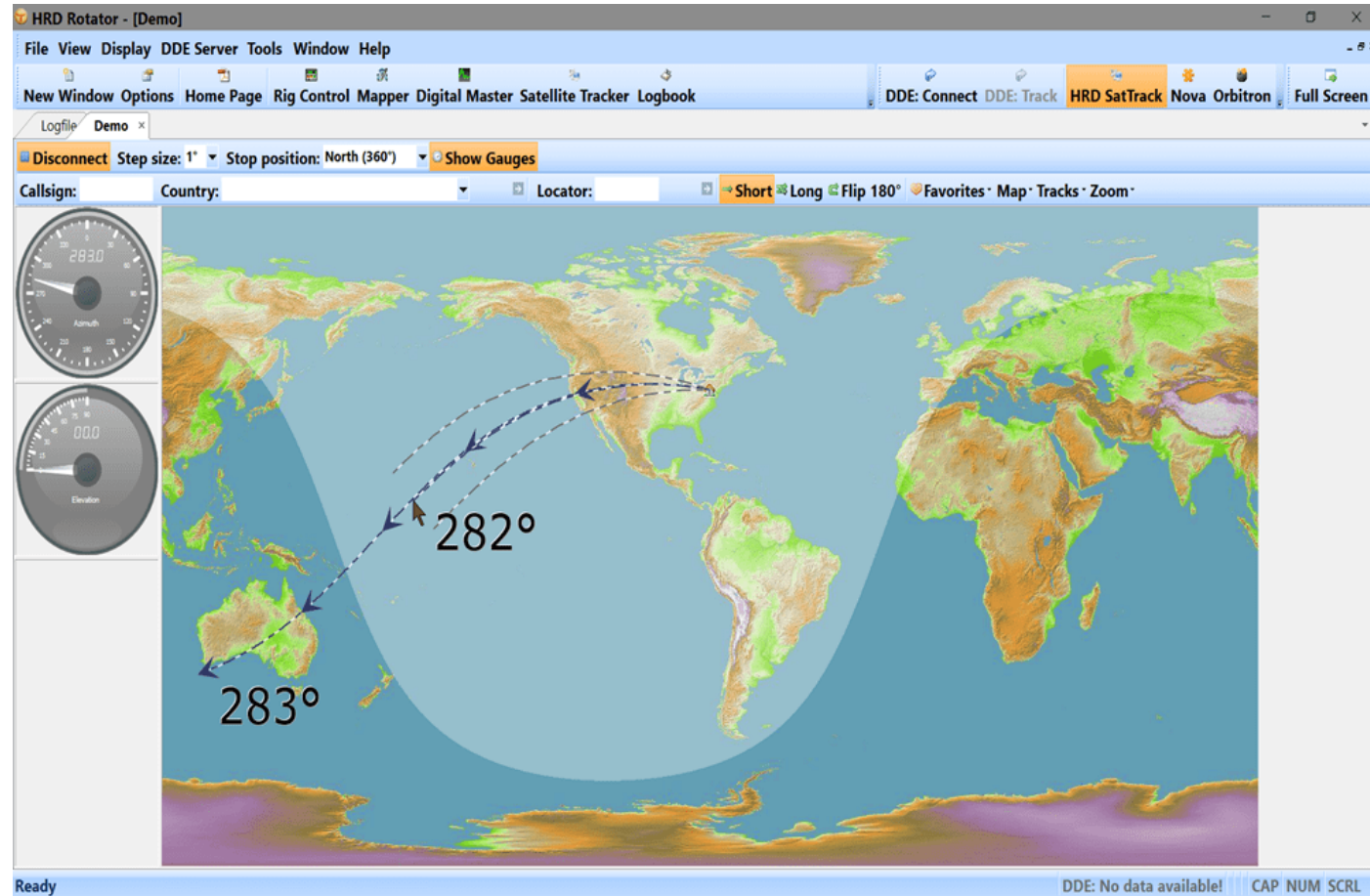
The screenshot displays the Digital Master 780 software interface for BPSK-31 digital mode. The main window is titled "Digital Master 780 - [BPSK-31]". The top menu bar includes File, Edit, View, QSO, Browser, Logbook, SSTV, DataController, SuperSweeper, World Map, Tools, Window, and Help. The top status bar shows the time 00:59:40 and the call sign KB3NPH. The main interface is divided into several sections:

- Left Panel:** Shows the frequency 21.230.000 and various mode settings (Mode: USB, AGC, Quick Mem: Ch 5, TX).
- Center Panel:** An "Add Log Entry" form with fields for (F2) Start, (F3) End, (F5) Call, Name, QTH, Locator, Country, Frequency, Band, Mode, Sent, and Rcvd.
- Right Panel:** A chat window for BPSK-31 showing a conversation. The text in the chat is:
m de efSbe
me Y N6FVY
CQ C? r- gt\$ aFVY N6FVY pse k
it has been fun chatting with iou, but! x t# has beea a long f3\
CQ CQ CQ de N6FVY N6,ie \$ NDFVY
CQ CQ CQ de N6FV? IVe pse k
t
VK2SOL
-
de N6FVY

Below the chat window is a control bar with buttons for Send (F4), Auto (F2), Pause (F3), Stop (F5), Repeat, and Abort. There are also keyboard shortcuts for CQ x 2, CQ, QRZ, Him de Me, Him de Me - K, RST, Name, QTH, Station, MFSK Pic, BTU, and 73. The status bar at the bottom shows "Enter text to be sent" and "986 Hz IMD: -31dB S/N: 33dB SCRL OVR CAP NUM".

The bottom section of the interface is a Waterfall display showing a spectrum plot with a zoom of x1. The main frequency is 986 Hz. The signal is identified as BPSK-31. The status bar at the very bottom shows "Ready", "CPU: 10%", "Audio: 100%", "Overload", and "HRD Logbook: My Logbook RSID OVR CAP NUM SCRL 00:59".

Quick Product Overview – Rotor Control



Quick Product Overview – Satellite Tracking

The screenshot displays the HRD Satellite Tracking software interface. The main window features a world map with a satellite icon and a circular tracking path. The interface is divided into several sections:

- Radio Pane:** Shows radio settings for local host, including VFO-A (435.847.574) and VFO-B (145.950.812).
- Tuning Dial:** Displays manual tuning options for RX and TX, with frequencies 435.847.574 and 145.950.812 respectively.
- Options:** Includes checkboxes for Manual Tuning, RX, and TX, along with a Transponder section.
- Next Passes:** A vertical list of satellite pass graphs for satellite FO-29, showing AOS (04:58:45) and various pass times (Today 20:48, Today 22:31, Wed 00:16, Wed 02:03).
- Bottom Status Bar:** Shows system information like CPU usage (5%) and server status (High DDE Server CAP NUM SCRL).

2017 in Review

- Management and ownership changes effective January 1, 2017
- Almost every single thing that our business on changed
 - New website provides better promotional capabilities
 - Manual is now an online wiki – <https://wiki.HamRadioDeluxe.com>
- Productive year for development
 - Added great talent
 - 9 releases, 150 changes
 - <http://ReleaseNotes.HamRadioDeluxe.com>
- Finished the year 10% better than 2016
 - Best ever month (December); best ever October, November
 - Paid off all debt
 - Never missed payroll
 - Employee moral improved greatly
 - We're re-earning the trust of our clients (0 negative feedback)

The Team

- Owners
 - Mike (WA9PIE) and Randy (K0CBH)
- Technical Support
 - Tim (KB3NPH), Kevin (KC7FPF), Ferry (PD9FER)
- Sales Support
 - Tammy (KB9YHU), Peggy, Veronica
- Software Development
 - Mike (K7ZCZ), Roger, Tomas (NW7US), Doug... and two others in-process of on-boarding

What We Sell and How We Support It

- One - We sell software activation keys to Ham Radio Deluxe. It's a "perpetual software license" to use the version of software that you purchased. This purchase includes 12 months of feature enhancements and direct access to our technical support staff. This is called "Software Maintenance and Support."
- And two - After that 12 month period expires, you have the option to renew Software Maintenance and Support in 12 month increments. This simply enables you to continue to receive software enhancements and have direct access to our technical support staff. This also helps to support the on-going development of Ham Radio Deluxe. Renewal optional, but is often incorrectly referred to as a "subscription." Renewals of Software Maintenance and Support are always 50% of the cost of a new software licence.

Support Options

- <https://Support.HamRadioDeluxe.com>
 - Email confirmations
- Email to support@hrdsoftwarellc.com
 - These go into the same system, creates a ticket, and generates confirmations.
- Phone (888) HRD-SOFT or (813) 434-4650
 - Live person or voicemail
 - Recorded in the same system, creates a ticket, and generates confirmations.

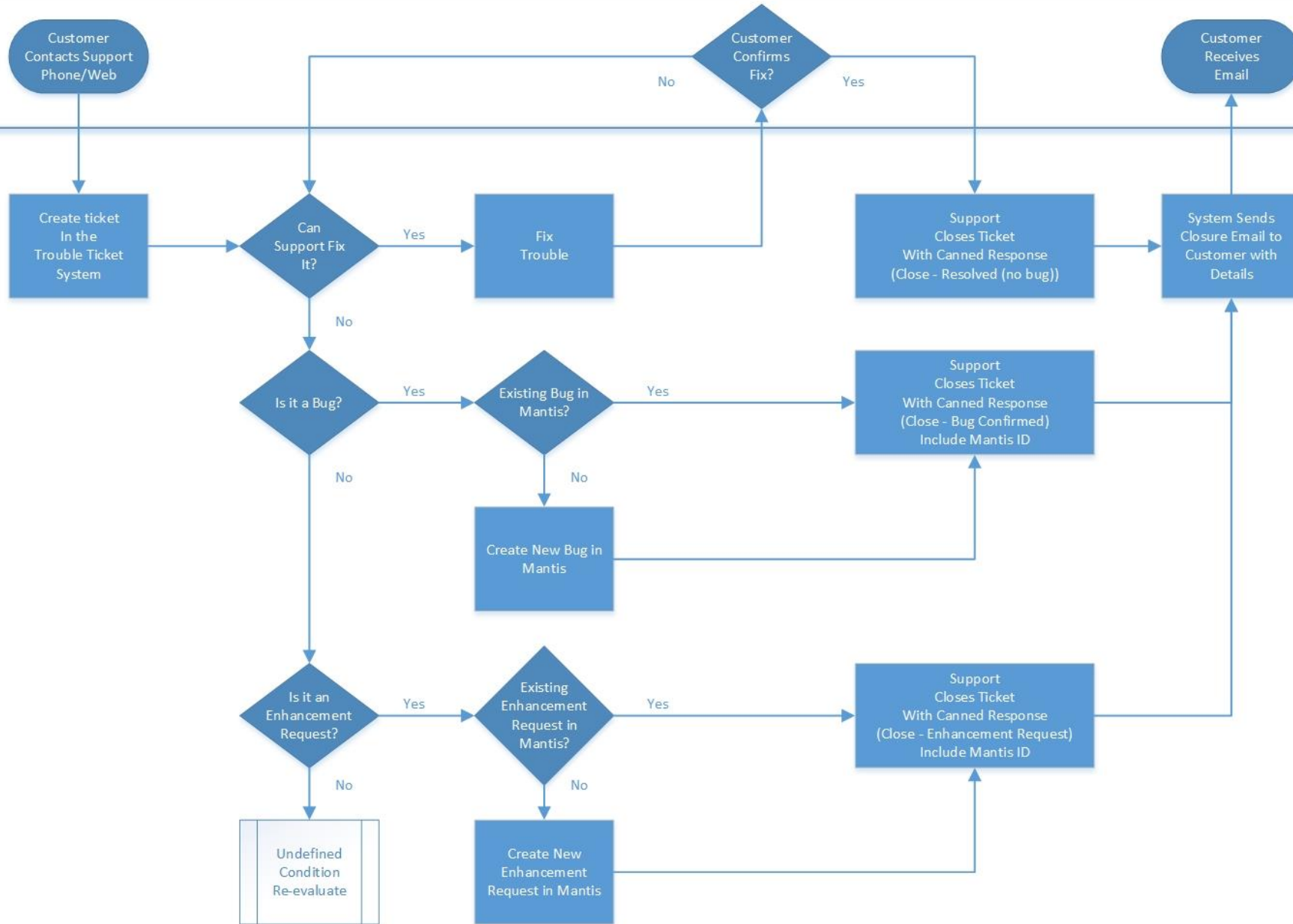
Other (Free) Support Options

- Forums on <https://Forums.HamRadioDeluxe.com>
- Like us on Facebook at www.Facebook.com/HamRadioDeluxe
- Follow us on Twitter www.Twitter.com/HamRadioDeluxe

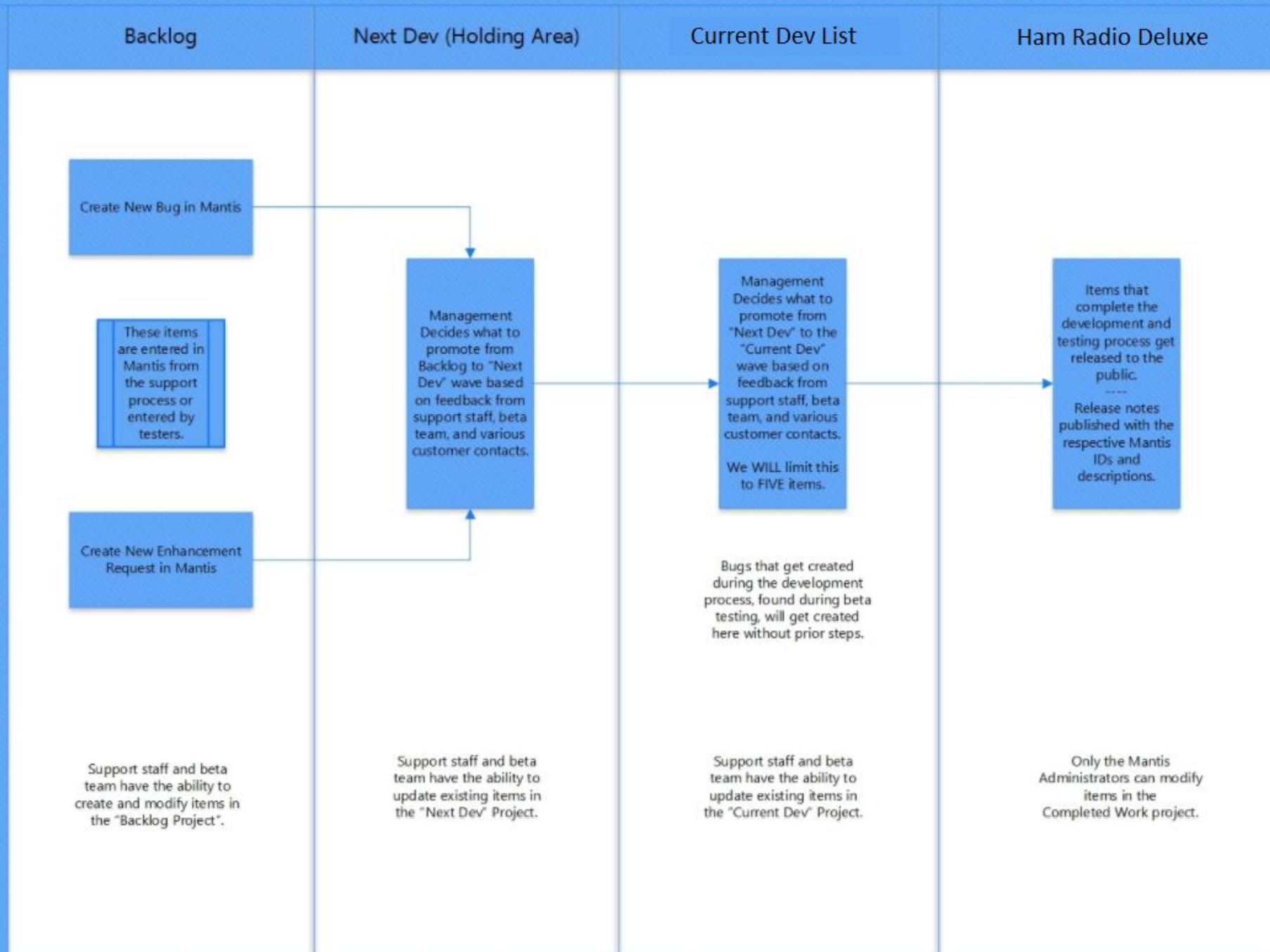
HRD Support Process

Customer

Support



HRD Software, LLC Software Development Process



We're Listening!

- In 2017, we made 150 requested changes (80/20); 10 releases.
- Thus far in 2018, we've made 84 changes; 3 releases.
- <http://ReleaseNotes.HamRadioDeluxe.com>

Approach for On-going Development

- “Troop Surge”
 - 1 full-time developer
 - Just added 2 freelance developers
 - Adding 2 more in February 2018
 - The goal – to reduce the development backlog of bugs and enhancements
- We seek to use an “80/20” approach
 - 80% of the release content related to bug fixes
 - 20% of the release content related to minor enhancements
- We seek to do 9 releases per year

Roadmap for Ham Radio Deluxe

- Short-term

- Use the “development approach” to:

- Make sure the things we that are in the software already work properly
 - Reduce the backlog (“technical debt”)
 - Replacement of License Server (many benefits, including license key recovery)

- For example:

- Get new radios added (IC-7610, etc)
 - Make sure the API works properly for those who connect to other applications
 - (WSJT, JTAlert, N1MM, etc)

- Long Term

- Re-write the Rig Control application
 - Multi-lingual versions (Spanish, French, German, etc)
 - Remote Access improvements
 - Versions that can run native on Linux and/or Mac

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- Instagram – www.Instagram.com/HamRadioDeluxe
- Pinterest – www.Pinterest.com/HamRadioDeluxe
- YouTube – www.YouTube.com/hrdsoftware
- Tumblr – <https://HamRadioDeluxe.tumblr.com>

20% Off

Come See Us At Our Booth

(Across from Elecraft)

Q&A

Thank You!