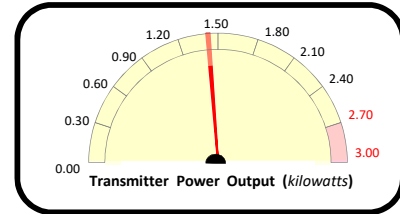


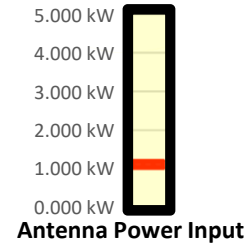
# Transmitter Power Output Worksheet

**Call letters:** WHAI(FM) (Auxiliary License Modification)  
**City of License:** Greenfield, MA  
**Channel:** CH252A (98.3 MHz)  
**File No:** BXLH-20041202ACY  
**Facility ID:** 25833  
**Applicant:** Saga Communications of New England, LLC



**Effective Radiated Power (ERP):** 1.450 kW

**Antenna Make:** Nicom USA, Inc. (NIC)  
**Antenna Model:** BKG77/3M(0.85WL)  
**No of Elements:** Three (3)  
**Antenna COR AGL:** 43 meters AGL  
**Antenna COR AMSL:** 96 meters AMSL  
**Max Input Power:** 5.000 kW



**Power Gain:** 1.41  
**Antenna Gain:** 1.492 dBd  
**Calculated Antenna Input Power:** 1.028 kW  
**Transmitter Rated Power:** 3.000 kW  
**Transmitter Make/Model:** BE FM-3C

**Power Gain to Antenna gain (dBd) Conversion:**  
 $=\text{Log}[\text{power gain}] * 10$

## Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline (Section 1)	Andrew HJ5-50	(0.369 dB/100 ft)	130 ft	-0.480 dBd
7/8" to 1 5/8" Adapter	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Isocoupler	Kintronics FMC-7.5 Isocoupler		n/a	-0.200 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline (Section 2)	Andrew HJ7-50A	(0.203 dB/100 ft)	220 ft	-0.447 dBd
7/8" to 1 5/8" Adapter	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Multi-Port Patch Panel	Myat 201-X Series Panel (or equivalent)		n/a	-0.100 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Transmitter	Andrew AVA5-50FX	(0.354 dB/100 ft)	20 ft	-0.071 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** 0.08 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 1.425 kW  
 $(1 / [10^{(0.08/10)}] \text{ ERP})$