

TECHNICAL CHARACTERISTICS

1 TECHNICAL CHARACTERISTICS

The following paragraphs list the technical characteristics of the XDD-350C transmitter/receiver.

1.1 TRANSMITTER TECHNICAL CHARACTERISTICS

Magnetron Type	PM-350C	
Operating Frequency	9100 to 9600 MHz	
Pulse Repetition Frequency (PRF) And Pulse Duration (Pulsewidth)	<u>Pulsewidth</u>	<u>PRF</u>
	2.0 usec	250
	1.0 usec	500
	0.4 usec	1180
	(All pulse width's and PRF'S are variable within duty cycle limits)	
Peak Power	350 kW	
TR Switching	Ferrite Duplexer with 5 usec recovery time. Isolation of 20 dB minimum with a solid state single long-life TR limiter	

1.2 RECEIVER TECHNICAL CHARACTERISTICS.

RF Frequency	5400 to 5700 MHz (see transmitter frequency)
Noise Figure (input to receiver)	3dB maximum, using low noise GaAsFET amplifier.
Mixer	Balanced Coaxial
Local Oscillator	Frequency Synthesizer with AFC.
IF Amplifiers	Digital
Intermediate Frequency	30 MHz

IF Bandwidth

Intensity- 0.60 MHz +/- 250 KHz
Velocity- 1.20 MHz +/- 250 KHz
3.00 MHz +/- 250 KHz

Dynamic Range

90 dB nominal

Sensitivity

-114 dBm @ .060 MHz Bandwidth

Range Normalization

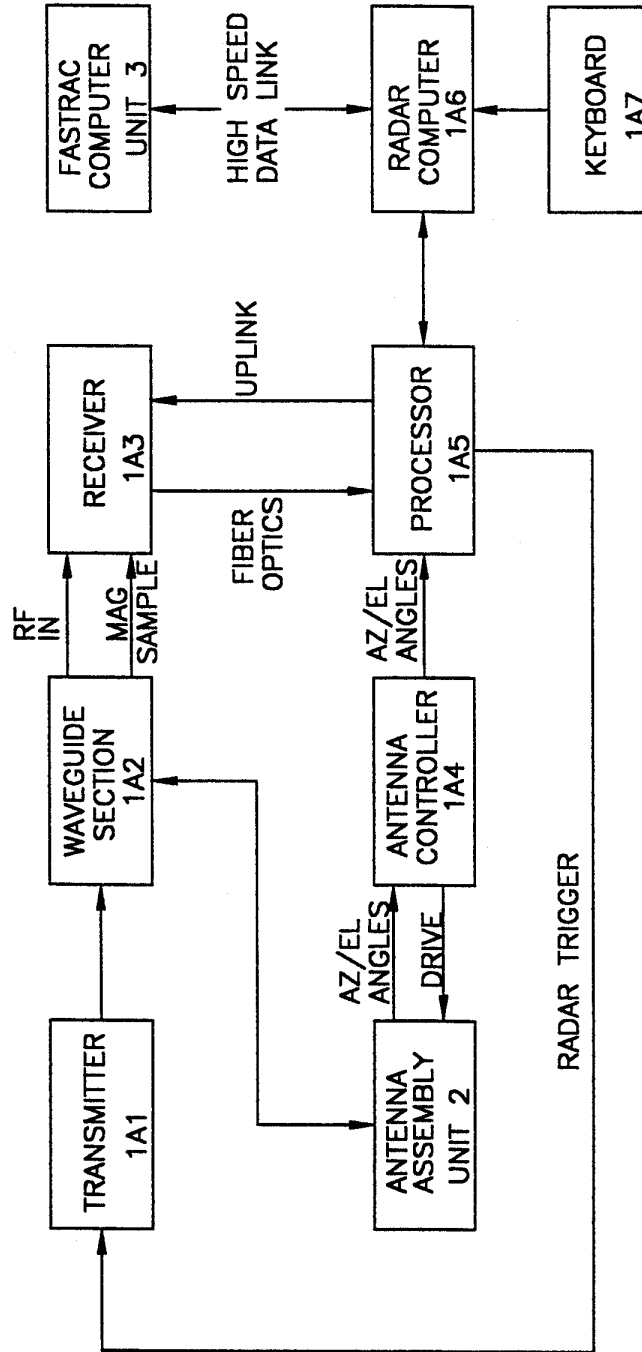
Provided by the radar control
processor with one over range
squared or other values downloaded
from the host computer.



DWG NO. BSI-104159 SHEET 1

REVISIONS		
ZONE	REV	DESCRIPTION
		DATE
		APPROVED

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BO	DATE 4/28/98
TOLERANCES ON FRACTIONS ± .005 ± .010 ± 1/2"	DECIMALS ± .005 ± .010 ± 1/2"	CHECKED DESIGN ENGINEER PROJ ENGINEER QUALITY ASSURANCE	BARON SERVICES INC. HUNTSVILLE, AL HDX BLOCK DIAGRAM MATERIAL SIZE A DRAWING NO. BSI-104159
HOLE DIA UP TO .500 UP TO 1.000 OVER 1.000		CONTRACT NO. APPROVAL	SCALE NA UNIT WT SHEET 1 OF 1