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ANALOGUE PROCESSING SYSTEM (APU)

This system will in block diagram fall immediately after the receiving system (either the standard R-390 or the new VHF solid state receiver to be used only at [REDACTED]). Its function is that of an adaptive threshold device which is capable of determining the half-amplitude points of the leading and trailing edges of a pulse, be it data or man made interference. By this ~~xxx~~ technique the normal degradation of the data due to amplitude fluctuations is no longer a severe problem in the timing accuracy resolution of the data. Both large and small signals are measured at their respective half-amplitude points so that narrow pulses all appear to be the same width in the output data and the same is true for all wide-pulses.

In addition to being able to determine the half-amplitude points in the data pulses, this APU device will disregard all pulses whose time duration is less than a very carefully determined length such as 80 microseconds. This APU instrument also has an AGC bus which holds the receiver noise output constant so that wide changes in the ambient noise seen in the receiver output will not adversely affect the ability of the APU.

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HANDLE VIA
BYEMAN-TALENT KEYHOLE-ORANGE
CONTROL SYSTEMS JOINTLY

DIGITAL PROCESSING ~~XXXXXX~~ UNIT^m (DPU)

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This instrument will be ~~_____~~ ionally evaluated for the first time in the ~~Washington area~~ during the first week of payload evaluation prior to deploying the collection team throughout the sites. The First (serial # 1) DPU will have been shipped to ~~_____~~ and checked out prior to this time so that during the very first overseas use of Mission 7105, this DPU ~~xx~~ system will be available for on-site

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