

Positive control of the RQ-4A is assured at all times through multiple links as depicted below:

Range	Link	Purpose	Location	
LOS ¹	(VHF/UHF)	ATC Voice at operating airfield	LRE	-
LOS	TCDL	Nose camera data	LRE	-
LOS	UHF	AV C2, health, & status	LRE	-
LOS	CDL (Ku & X)	AV C2, health, & status, sensor data, V/UHF Voice	-	MCE
BLOS	INMARSAT	AV C2	LRE	MCE
BLOS	UHF SATCOM	AV C2	LRE	MCE
BLOS ²	Ku SATCOM	AV C2, health, & status, sensor data, UHF Voice	-	MCE
¹ LOS Voice communications are direct transmissions from the LRE to the controlling airport ATC and do not go through the UAS ² BLOS Voice communications are routed from the MCE and relayed through a spaced-based satellite, and ultimately through the UAS to the affected ATC control facility.				