	2 3 4 1 2 3 4 1 2 3 4 1 2 3
RF Modem	
RF Modem hardware (including clock recovery)	777770
Measure performance and make improvements	77777777
Complete PCB board design and fabrication	
Measure transmission performance	V////A
RF System Issues	
RF Issues: Interference and the resulting compromises and modifications	
Test and compare QAM and OFDM (from Rennes)	
Implement second generation modem design	
Motion Compensated Data Compression	
Flow-Field encoding	
Residue encoding	
Multiple-frame motion computation and encoding	V//////
Study adaptivity controls of algorithms	7////
Other compression approaches (are there new or relevant concepts?)	
Encoder simulation: bit-stream generation, buffer management, etc.	
Develop preliminary error management strategy	
Color Encoding	
Relationship of data compression and transmission channel Simulate effects of channel errors	
Extend Hierarchy Concept - How much protection for each data type?	
Study the possibility of integrated Source/Channel Coding	
Develop a complete "FCC proposal"	
RF issues, transmitted power, radius of coverage, BERs, etc	
Signal Format: Synchronization, Audio, Video, Error management, etc	
Proposal Document preparation	
Develop a Complete System-Level Simulation	
Video compression with buffer management and feedback	
Bit stream generation of sync, audio, video, ECC	
Simulation of transmission errors	
Receiver decompression with ECC and concealment	
Strategic activities	
Attend relevant U.S. standards activities, committees, conferences	
Government: FCC, NIST, Commerce, DARPA, DoD, NTIA, NSF, NASA, JPL	
Computing: IBM, DEC, Sun, HP, Apple	
Communications: AT&T, RBOCs, Bellcore	
Semiconductors: TI, Motorola, Intel,	
Develop an FCC simulation system	
Software compression on the PE	
Interfaces: PE to D2 and D2 to RF modem	
System integration	
Participate in FCC demonstrations and process	
System delivery setup and return	
Participation in testing and measurement	
Other demonstrations and activities (NAB etc.)	
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