

CHDC Meeting

Intro	Introduction	Doe	5 min
	Summary of Current Comm Approaches	Klofas	5 min
Near Term Solutions	Update to NTIA Process	Clegg/Klofas	10 min
	CHDC in 460-470 MHz for DICE	Swenson	10 min
Long Term Vision	Multiple Mission Approach	Williams	1 hr Discussion
	Survey	Malsbury	
	Space Segment	Jones, Brown	
	Ground Segment	Ettus	
	Ground Station Networks	Cutler	
	World Radio Conference	Gergely/Swenson	
	Unified S-Band		
Future	Future Support Needs	Willams	10 min
	Wrap Up / Action Items		10 min

CHDC Goals

- Maximize downlink bandwidth and contact time for science missions
- Lower cost/regulatory burden on PIs
- Establish open knowledge base of NSF-specific CHDC solutions

Scope

- Ad-hoc initiative
- PI teams, NSF managers, commercial engineering, and NASA support

Summary of Current Approaches

Award	Project	PIs	License				Downlink Frequencies
			Type	Agency	Sponsor	Status	
# 1	RAX	Cutler/Bahcivan	Amateur/ISM	FCC	UMich	Granted	437 MHz, 9600baud FSK; 2.4 GHz ISM
	FireFly	Rowland/Weatherwax	Space Research	NTIA	NASA	Submitted	400 MHz
Stimulus	FIREBIRD	Klumpar/Spence	Experimental	FCC	MSU	Pending	145 MHz, 19200baud GMSK
	DICE	Crowley/Swenson	Meteorological Satellite	NTIA	NSF	Not submitted	460 MHz, 1.5Mbps
# 2	CINEMA	Lin	Space Research	NTIA	NASA		2.2 GHz
	CSSWE	Li/Palo	Meteorological Satellite ?	NTIA	NSF		UHF ?

Summary of Current Approaches

	Spacecraft	Ground
RAX	AstroDev Helium	Icom 910
FireFly	AstroDev Colony-2	
FIREBIRD	CC1020	
DICE	L-3 Cadet	USRP
CINEMA	Emhiser	
CSSWE		

