

HHFW/RF Task Group



J.R Wilson - leader

D. W. Swain - deputy

NSTX Research Forum

November 28-30, 2001

Princeton NJ



Los Alamos
NATIONAL LABORATORY



Responsibilities of the HHFW Task Group



- Explore and verify the physics of RF waves on NSTX
 - Wave propagation and absorption
 - Interaction with ions
 - Coupling and phasing studies
- Establish possible applications of RF to meet ST research goals
 - Establish current drive
 - Low frequency operation/possible stochastic heating

Issues to be Addressed During this Run Period



- Continuation of electron heating physics
 - Expansion to higher density
 - Exploration of configuration dependence
 - Experimental verification of deposition
- Explore ion interaction
 - Expanded NPA capability
 - Modeling
- Current drive
 - Demonstrate presence of driven current
- EBW physics
 - Continue emission measurements

Organization of Breakout Session



- Divide the time into four equal one hour blocks devoted to each of the preceding topics
- Begin with SHORT presentations of ideas/new capabilities
- Spend most of the hour discussing a plan for research in the given area - arriving at
- An outline of a run plan that can be developed into one or more XP's

Schedule



- Heating 1:30-2:30
 - LeBlanc
 - Discussion
- Ion Interaction 2:30- 3:30
 - Rosenberg
 - Harvey
 - Discussion
- Current Drive 3:30-4:30
 - Swain
 - Mau
 - Discussion
- EBW 4:30-5:30
 - Taylor
 - Harvey
 - Discussion