CONVERSATIONS UNLIMITED - Monday, Aug. 19, 1985 INTRO UP AND UNDER

Hi, everybody. Strolling through a department store the other day, I spotted a telescope set up on a modest tripod. That sight brought back to me a childhood desire to look at the stars through a powerful telescope. That may be a feeling familiar to you. Most kids are curious enough about the sky and everything that's in it to want to look at it closely. Today we'll talk with a man who has never stopped looking upwards and outwards at the sky.

Dr. John Caldwell is associate professor in the Department of Earth and Space Sciences at the State University of New York at Stony Brook. He is one of a hundred scientists from around the United States who are working towards putting a powerful telescope into orbit around the world in 1986. The idea is to get tense and cameras out beyond the Earth's atmosphere in order to get better images of what lies beyond. How did you happen to be chosen for the project, Dr. Caldwell?

INTERVIEW JOHN CALDWELL:

- -- Review NASA space shot plans
- -- Equipment being built
- -- Launch
- -- His role
- -- Highlights of planned research

14:00

We'll return in a moment for more on research in space with John Caldwell. Please stay with us to be BRIDGE MUSIC UP AND UNDER

Hi. I'm Al Oickle. I'm at the State University of New York at Stony Brook with Dr. John Caldwell, associate professor in Stony Brook's Department of Earth and Space Sciences. Dr. Caldwell is one of a hundred scientists preparing for the launch by NASA in June 1986 of a telescope and other equipment that will see beyond Earth's atmosphere better than any telescope ever has. Let's talk

- , about some of the areas that most interest scientists, Dr. Caldwell. What about other planets that we don't even know about? INTERVIEW JOHN CALDWELL:
 - -- Transition of molecules
 - -- Revisits and maintenance by astronauts
 - -- Mercury observation before sunrise only
 - -- Venus ditto
 - -- Halley's comet
- -- Uranus and Neptune ("There is no satisfactory explanation of why the more distant planet has the warmer stratosphere.")
 - -- 200 candidate stars brighter than visual magnitude 16
 - -- 20 or more years of ST, then...

29:00 OUTRO