Late Night with Professor McNeill
TECH MEMO 1

TO: Prof. W. D. Stratton
FROM: John A. McNeill
DATE: February 2, 1981
SUBJECT: The Op-amp: Inverting Configuration

ABSTRACT

In this lab, the response of the op-amp inverting topology is investigated. as well as many other things.

EQUIPMENT

1) Tektronix 502A Oscilloscope
2) (2) Harrison power supplies
3) Hewlett Packard signal generator model 200CD
   type 741 op-amp
   assorted resistors, all with tolerance 5%
A copper-vapor laser sends a green beam through the 3.5-meter-diameter telescope of the Starfire Optical Range in New Mexico, creating an artificial guide star near the astronomical object under study. The object's image is distorted by turbulence in the earth's atmosphere, and light returning from the artificial star is analyzed to help correct the distortion. Adaptive optics endows large telescopes on the ground with an angular resolution close to what they would achieve in the vacuum of space.
\[ h = 6.626 \times 10^{-34} \text{ J} \cdot \text{sec} \]
\[ c = 2.998 \times 10^8 \text{ m/sec} \]

\[ E = h \nu = \frac{hc}{\lambda} \]

\[ 1e^- = 1.6 \times 10^{-19} \text{ coul} \]

\[ i_{nR} = \left( \frac{0.1287 \text{nArms} \cdot \sqrt{\Omega}}{\sqrt{Hz}} \right) \frac{1}{\sqrt{R}} \]

\[ e_{nR} = \left( \frac{0.1287 \text{nVrms}}{\sqrt{\Omega \cdot Hz}} \right) \sqrt{R} \]

\[ e_{nc} = \left( 0.08 \text{nVrms} \cdot \sqrt{F} \right) \frac{1}{\sqrt{C}} \]
One good Amplifier = One Paycheck

Get to work McNeil
April 12, 1994

Mr. John A. McNeill
40 Channing Road
Belmont, MA 02178

Dear Mr. McNeill:

On the recommendation of Professor John A. Orr, I am pleased to offer you a position as Assistant Professor in the Department of Electrical and Computer Engineering beginning with the 1994-95 academic year.