



William Shakespeare's
will said:

"I give unto my wife
my second best bed
and its furnishings."

Don't second-best your wife. And
please don't forget Caltech®. For
further information on providing
for Caltech in your will, contact:

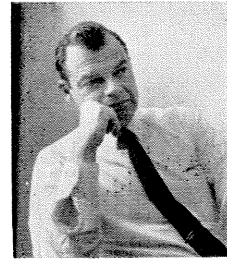
WILLIAM C. CASSELL
DIRECTOR OF INCOME TRUSTS AND BEQUESTS
CALIFORNIA INSTITUTE OF TECHNOLOGY
1201 E. CALIFORNIA BOULEVARD
PASADENA, CALIFORNIA 91109
OR PHONE: (213) 795-6841

**In fact, you might consider increas-
ing your wife's estate (and yours,
too, while living) through a Caltech
Life Income Trust or Annuity.*



E&S

IN THIS ISSUE



RECOMMENDED CHANGES

Rolf H. Sabersky re-
ceived his BS, MS, and
PhD degrees from Cal-
tech and has been a
faculty member here
since 1949. As a con-
sulting engineer in the
aerospace industry as
well as a professor of mechanical engineering at
Caltech, Dr. Sabersky is in a unique position to
evaluate what needs to be done to prepare to-
day's engineer for industry because he knows
both the requirements of industry and the
problems which face the young engineer. On
pages 8-10, he expresses his views on the need
for changes in engineering education.

A NEW APPROACH TO TEACHING

Basic engineering prin-
ciples at Caltech are no
longer routinely taught
from textbooks. In a
new course developed
by William Corcoran,
professor of chemical
engineering and execu-
tive officer for the department, the artificial
kidney is now used as a teaching aid. Dr. Cor-
coran describes this new method of teaching
chemical engineering on pages 11-15.



A SPECIAL REPORT

A threatened crisis in the financing of higher
education is an immediate concern to colleges
and universities throughout the country. Recog-
nizing the need for all U.S. institutions of higher
learning to take a broad look at the nature of the
impending trouble, the American Alumni Council
has prepared a special report on this subject.
"The Plain Fact Is . . ." which appears on
page 17 of this issue of *Engineering and Science*,
will also appear in this month's issues of other
college and university magazines. We present
this report as a cogent statement of a general
problem with specific application to the Cali-
fornia Institute of Technology. On page 16
Caltech President Lee A. DuBridge underscores
the significance of the report in his introductory
statement, "The Investment We Cannot Afford
Not to Make."

THE DRAFT

Although the hot breath of the draft seems a
long way off to a college freshman, the concern
of his friends, the seniors, is constantly and
everywhere apparent. Caltech freshman Jim
Cooper, an editor of the student newspaper,
listens to his senior schoolmates and reports—on
pages 40 and 41.