**CASE STUDIES**

***TELOXY ENGINEERING (A)***

Teloxy Engineering has received a one-time contract to design and

build 10,000 units of a new product. During the proposal process,

management felt that the new product could be designed and

manufactured at a low cost. One of the ingredients necessary to build the product was a small component that could be purchased for $60 in the marketplace, including quantity discounts. Accordingly, 1378

management budgeted $650,000 for the purchasing and handling of 10,000 components plus scrap.

During the design stage, your engineering team informs you that the final design will require a somewhat higher-grade component that sells for $72 with quantity discounts. The new price is substantially higher than you had budgeted for. This will create a cost overrun.

You meet with your manufacturing team to see if they can manufacture the component at a cheaper price than buying it from the outside. Your manufacturing team informs you that they can produce a maximum of 10,000 units, just enough to fulfill your contract. The setup cost will be $100,000 and the raw material cost is $40 per component. Since

Teloxy has never manufactured this product before, manufacturing

expects the following defects:

All defective parts must be removed and repaired at a cost of $120 per part.