EXERCISE 14-3 (15-20 minutes)

1. Paul Simon Company:

   (a) 1/1/01  
        Cash ................................................... 200,000
        Bonds Payable.......................... 200,000

   (b) 7/1/01  
        Bond Interest Expense...................... 4,500
        ($200,000 X 9% X 3/12)
        Cash .......................................... 4,500

   (c) 12/31/01  
        Bond Interest Expense...................... 4,500
        Interest Payable........................ 4,500

2. Graceland Company:

   (a) 6/1/01  
        Cash ................................................... 105,000
        Bonds Payable.......................... 100,000
        Bond Interest Expense............... 5,000
        ($100,000 X 12% X 5/12)

   (b) 7/1/01  
        Bond Interest Expense...................... 6,000
        Cash .......................................... 6,000
        ($100,000 X 12% X 6/12)

   (c) 12/31/01  
        Bond Interest Expense...................... 6,000
        Interest Payable........................ 6,000
EXERCISE 14-5

(a) 1/1/02  Cash ($600,000 X 102%) ......................... 612,000
       Bonds Payable ..................................... 600,000
       Premium on Bonds Payable ..................... 12,000

(b) 7/1/02  Bond Interest Expense ...................... 29,835
           ($612,000 X 9.75% X 1/2)
           Premium on Bonds Payable .................. 165
           Cash ........................................ 30,000
           ($600,000 X 10% X 6/12)

(c) 12/31/02 Bond Interest Expense ............ 29,827
     ($611,835 X 9.75% X 1/2)
     Premium on Bonds Payable .................. 173
     Interest Payable ............................. 30,000

Carrying amount of bonds at July 1, 2002:
Carrying amount of bonds at January 1, 2002  $612,000
Amortization of bond premium
     ($300,000 – $29,835)  (165)
Carrying amount of bonds at July 1, 2002  $611,835
*EXERCISE 14-20 (15-20 minutes)*

(a) Transfer of property on December 31, 2001:

**Larisa Nieland Company (Debtor):**

- Note Payable .................................................. 200,000
- Interest Payable ........................................... 18,000
- Accumulated Depreciation—Machine ........ 221,000
  - Machine .................................................. 390,000
  - Gain on Disposition of Machine .......... 21,000\(^a\)
  - Gain on Debt Restructuring .............. 28,000\(^b\)

\(^a\)$190,000 – ($390,000 – $221,000) = $21,000.

\(^b\)($200,000 + $18,000) – $190,000 = $28,000.

**First State Bank (Creditor):**

- Machine .................................................. 190,000
- Allowance for Doubtful Accounts ......... 28,000
- Note Receivable ......................................... 200,000
- Interest Receivable ................................. 18,000

(b) “Gain on Machine Disposition” should be reported as an *ordinary* gain in the income statement in accordance with *APB Opinion No. 30*. On the other hand, “Gain on Debt Restructuring” should be reported as an *extraordinary* item in the income statement in accordance with *FASB Statement No. 4*. 
(c) Granting of equity interest on December 31, 2001:

**Larisa Nieland Company (Debtor):**
- Note Payable ............................................ 200,000
- Interest Payable ........................................ 18,000
  - Common Stock ........................................ 150,000
  - Additional Paid-in Capital .................. 40,000
  - Gain on Debt Restructuring ............ 28,000

**First State Bank (Creditor):**
- Investment (Trading) ......................... 190,000
- Allowance for Doubtful Accounts .......... 28,000
- Note Receivable ................................... 200,000
- Interest Receivable ............................ 18,000

*EXERCISE 14-21 (20-30 minutes)*

(a) No. The gain recorded by Bradtke is not equal to the loss recorded by Firstar Bank under the debt restructuring agreement. (You will see why this happens in the following four exercises.) In response to this “accounting unsymmetry” treatment, FASB stated that *Statement No. 114* does not address debtor accounting because the FASB was concerned that expansion of the scope of the statement would delay its issuance.

(b) No. There is no gain under the modified terms because the total future cash flows after restructuring exceed the total pre-restructuring carrying amount of the note (principal):

- Total future cash flows after restructuring are:
  - Principal ........................................... $1,600,000
  - Interest ($1,600,000 X 10% X 3) ........ 480,000

Total pre-restructuring carrying amount of note (principal): $2,000,000
**EXERCISE 14-23 (25-30 minutes)**

(a) Yes. Bradtke Company can record a gain under this term modification. The gain is calculated as follows:

Total future cash flows after restructuring are:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$1,300,000</td>
</tr>
<tr>
<td>Interest ($1,300,000 X 10% X 3)</td>
<td>390,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,690,000</strong></td>
</tr>
</tbody>
</table>

Total pre-restructuring carrying amount of note (principal):

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

Therefore, the gain = $2,000,000 – $1,690,000 = $310,000.

(b) The entry to record the gain on December 31, 2001:

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note Payable</td>
<td>$310,000</td>
<td></td>
</tr>
<tr>
<td>Gain on Debt Restructuring</td>
<td></td>
<td>$310,000</td>
</tr>
</tbody>
</table>

(c) Because the new carrying value of the note ($2,000,000 – $310,000 = $1,690,000) equals the sum of the undiscounted future cash flows ($1,300,000 principal + $390,000 interest = $1,690,000), the imputed interest rate is 0%. Consequently, all the future cash flows reduce the principal balance and no interest expense is recognized.
(d) The interest payment schedule is prepared as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash Interest (10%)</th>
<th>Effective Interest (0%)</th>
<th>Reduction of Carrying Amount</th>
<th>Carrying Amount of Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/01</td>
<td>$130,000a</td>
<td>$0</td>
<td>$130,000</td>
<td>$1,690,000</td>
</tr>
<tr>
<td>12/31/02</td>
<td>130,000</td>
<td>0</td>
<td>130,000</td>
<td>1,560,000b</td>
</tr>
<tr>
<td>12/31/03</td>
<td>130,000</td>
<td>0</td>
<td>130,000</td>
<td>1,430,000</td>
</tr>
<tr>
<td>12/31/04</td>
<td>130,000</td>
<td>0</td>
<td>130,000</td>
<td>1,300,000</td>
</tr>
<tr>
<td>Total</td>
<td>$390,000</td>
<td>$0</td>
<td>$390,000</td>
<td></td>
</tr>
</tbody>
</table>

a$1,300,000 \times 10\% = $130,000.

b$1,690,000 − $130,000 = $1,560,000.

(e) Cash interest payment entries for Bradtke Company are:

December 31, 2002, 2003, and 2004

<table>
<thead>
<tr>
<th>Note Payable</th>
<th>130,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>130,000</td>
</tr>
</tbody>
</table>

(f) The payment entry at maturity is:

January 1, 2005

<table>
<thead>
<tr>
<th>Note Payable</th>
<th>1,300,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,300,000</td>
</tr>
</tbody>
</table>
EXERCISE 14-24 (20-30 minutes)

(a) The loss can be calculated as follows:
Pre-restructuring carrying amount of note $2,000,000
Less: Present value of restructured future cash flows:
  Present value of principal $1,300,000 due in 3 years at 12% $925,314\(^a\)
  Present value of interest $130,000 paid annually for 3 years at 12% 312,238\(^b\)
Loss on debt restructuring $762,448

\(^a\)$1,300,000 X .71178 = $925,314
\(^b\)$130,000 X 2.40183 = $312,238

December 31, 2001
Bad Debt Expense .............................................. 762,448
Allowance for Doubtful Accounts ............ 762,448

(b) The interest receipt schedule is prepared as follows:

FIRSTAR BANK
INTEREST RECEIPT SCHEDULE AFTER DEBT RESTRUCTURING
EFFECTIVE INTEREST RATE 12%

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash Interest (10%)</th>
<th>Effective Interest (12%)</th>
<th>Increase in Carrying Amount</th>
<th>Carrying Amount of Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/01</td>
<td></td>
<td></td>
<td></td>
<td>$1,237,552</td>
</tr>
<tr>
<td>12/31/02</td>
<td>$130,000(^a)</td>
<td>$148,506(^b)</td>
<td>$18,506(^c)</td>
<td>1,256,058</td>
</tr>
<tr>
<td>12/31/03</td>
<td>130,000</td>
<td>150,727</td>
<td>20,727</td>
<td>1,276,785</td>
</tr>
<tr>
<td>12/31/04</td>
<td>130,000</td>
<td>153,215</td>
<td>23,215</td>
<td>1,300,000</td>
</tr>
<tr>
<td>Total</td>
<td>$390,000</td>
<td>$452,448</td>
<td>$62,448</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)$1,300,000 X 10% = $130,000.
\(^b\)$1,237,552 X 12% = $148,506.
\(^c\)$148,506 – $130,000 = $18,506.
(c) Interest receipt entries for Firstar Bank are:

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash (130,000)</th>
<th>Allowance for Doubtful Accounts (18,506)</th>
<th>Interest Revenue (148,506)</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 31, 2002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31, 2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31, 2004</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(d) The receipt entry at maturity is:

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash (1,300,000)</th>
<th>Allowance for Doubtful Accounts (700,000)</th>
<th>Note Receivable (2,000,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2005</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(a) Present value of the principal
\[ \$1,500,000 \times 0.38554 \text{ (PV}_{10,10\%}) \] $578,310

Present value of the interest payments
\[ \$157,500^* \times 6.14457 \text{ (PVOA}_{10,10\%}) \] 967,770

Present value (selling price of the bonds) $1,546,080

\[ ^*\$1,500,000 \times 10.5\% = \$157,500 \]

Cash .............................................................. 1,496,080
Unamortized Bond Issue Costs ...................... 50,000
Bonds Payable ............................................... 1,500,000
Premium Bonds Payable ............................... 46,080

(b)

<table>
<thead>
<tr>
<th>Date</th>
<th>Cash Price</th>
<th>Interest Expense</th>
<th>Premium Amortization</th>
<th>Carrying Amount of Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/99</td>
<td></td>
<td></td>
<td></td>
<td>$1,546,080</td>
</tr>
<tr>
<td>1/1/00</td>
<td>$157,500</td>
<td>$154,608</td>
<td>$2,892</td>
<td>1,543,188</td>
</tr>
<tr>
<td>1/1/01</td>
<td>157,500</td>
<td>154,319</td>
<td>3,181</td>
<td>1,540,007</td>
</tr>
<tr>
<td>1/1/02</td>
<td>157,500</td>
<td>154,001</td>
<td>3,499</td>
<td>1,536,508</td>
</tr>
<tr>
<td>1/1/03</td>
<td>157,500</td>
<td>153,651</td>
<td>3,849</td>
<td>1,532,659</td>
</tr>
</tbody>
</table>

(c) Carrying amount as of 1/1/02 $1,536,508
Less: Amortization of bond premium
\[ (3,849 \div 2) \] 1,925
Carrying amount as of 7/1/02 $1,534,583

Reacquisition price $800,000
Carrying amount as of 7/1/02
\[ (1,534,583 \div 2) \] (767,292)
Extraordinary loss $32,708
PROBLEM 14-2 (Continued)

**Entry for accrued interest**

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Expense</td>
<td>38,413</td>
</tr>
<tr>
<td>Premium on Bonds Payable</td>
<td>962</td>
</tr>
<tr>
<td></td>
<td>($3,849 X 1/2 X 1/2)</td>
</tr>
<tr>
<td>Cash</td>
<td>39,375</td>
</tr>
<tr>
<td></td>
<td>($157,500 X 1/2 X 1/2)</td>
</tr>
</tbody>
</table>

**Entry for reacquisition**

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds Payable</td>
<td>750,000</td>
</tr>
<tr>
<td>Premium on Bonds Payable</td>
<td>17,292*</td>
</tr>
<tr>
<td>Loss on Redemption of Bonds (Extraordinary)</td>
<td>32,708</td>
</tr>
<tr>
<td>Cash</td>
<td>800,000</td>
</tr>
</tbody>
</table>

*Premium as of 7/1/02 to be written off

\[(1,534,582 - 1,500,000,000) \times \frac{1}{2} = 17,292\]
(a) It is a troubled debt restructuring.

(b) 1. Hillary Inc.: No entry necessary.
2. Bad Debt Expense........................................ 158,208*
Allowance for Doubtful Accounts .... 158,208

*Calculation of loss.

Pre-restructure carrying amount $400,000
Present value of restructured cash flows:
   Present value of $400,000 due in 10 years at 12%, interest payable annually (Table 6-2); ($400,000 X .32197) $128,788
   Present value of $20,000 interest payable annually for 10 years at 12% (Table 6-4); ($20,000 X 5.65022) 113,004 (241,792)
Creditor’s loss on restructure $158,208

(c) Statement No. 114 amends Statement No. 15 so losses are now calculated based upon the discounted present value of future cash flows; thus, this fairly approximates the economic loss to the lender. However, Statement No. 114 did not amend debtor accounting. The debtor’s gain is still calculated under Statement No. 15 using the undiscounted cash flows. This does not fairly state the economic benefits derived by the debtor as a result of the restructuring.