EXAMPLE OF YIELD MAINTENANCE CALCULATION IN CONNECTION WITH A PARTIAL PREPAYMENT (APPLICATION OF LOC PROCEEDS) FOR NOTE VERSIONS PRIOR TO 11/2001

## GIVEN:

(1) Date of the note (closing date) $=9 / 30 / 90$
(2) Loan Term = 10 years
(3) Yield Maintenance Period $=7$ years (ending 9/29/97)
(4) $N o t e ~ r a t e=" c "=10.5 \% ~(.105)$
(5) Servicing fee $=" s "=.50 \%(.005)$
(6) Date of Partial Prepayment $=6 / 30 / 94$
(7) Yield on pre-selected Treasury security* $=$ " $r$ " $=8.4 \%$ (.084)
(8) Total proceeds from cashed LOC = "a" = \$600,000
*Yield on security as reported in Wall Street Journal on fifth business day preceding the date on which Fannie Mae applies the LOC proceeds to the UPB of the loan.

THEN:
(a) Remaining yield maintenance period $=$ " $n$ " $\quad=6 / 30 / 94$ to $9 / 29 / 97$

$$
\text { = } 1187 \text { days (actual number of days) }
$$

$$
=3.2521 \text { years (365/366-day years) }
$$

(b) Present value factor $=$ "f " $=\underline{1-(1+r)^{-n}}$

$$
=\frac{1-(1+.084)^{-3.2521}}{.084}
$$

$$
=2.7467
$$

(c) Portion of proceeds to be applied to UPB = "b"

$$
\begin{aligned}
& =\frac{a}{1+f(c-r)} \\
& =\frac{600,000}{1+(2.7467)(.105-.084)} \\
& =\$ 567,278.80
\end{aligned}
$$

(d) Yield maintenance premium due

$$
\begin{aligned}
& =a-b \\
& =600,000-567,278.80 \\
& =\$ 32,721.20
\end{aligned}
$$

(e) Lender's share of premium $=s \times f \times b^{* *}$

$$
\begin{aligned}
& =.005(2.7467)(567,278.80) \\
& =\$ 7,790.72
\end{aligned}
$$

${ }^{* *}$ To the extent that such amount does not exceed the difference between (i) the total premium and (ii) $1 \%$ of the amount to be applied to the UPB of the loan.
(f) Fannie Mae's share of premium $=\$ 32,721.20-\$ 7,790.72$

$$
=\$ 24,930.48
$$

GIVEN:
(1) Date of the note (closing date) $=9 / 30 / 90$
(2) Loan Term = 10 years
(3) Yield Maintenance Period = 7 years (ending 9/29/97)
(4) $N$ Note rate $=" c "=10.5 \% ~(.105)$
(5) Servicing fee $=" \mathrm{~s}$ " $=.50 \%$ (.005)
(6) Date of Partial Prepayment $=6 / 30 / 94$
(7) Yield on pre-selected Treasury security* $=$ " $\mathrm{r} "=8.4 \%$ (.084)
(8) Total proceeds from cashed LOC = "a" = \$600,000
**Yield on security as reported in The Wall Street Journal on the twenty-fifth Business Day preceding the Borrower's Intended Prepayment Date on the Borrower's formal notice of intent to prepay.

THEN:
(a) Remaining yield maintenance period = " $n$ " $\quad \begin{array}{ll} & =6 / 30 / 94 \text { to } 9 / 29 / 97 \\ & =1187 \text { days (actual number of days) } \\ & =3.2521 \text { years (365/366-day years) }\end{array}$
(b) Present value factor $=$ " f " $=\frac{1-(1+r)-\mathrm{n}}{r}$

$$
=\frac{1-(1+.084)-3.2521}{.084}
$$

$$
=2.7467
$$

(c) Portion of proceeds to be applied to UPB = "b"

$$
\begin{aligned}
& =\frac{a}{1+f(c-r)} \\
& =\frac{600,000}{1+(2.7467)(.105-.084)} \\
& =\$ 567,278.80
\end{aligned}
$$

(d) Yield maintenance premium due $=\mathrm{a}-\mathrm{b}$
$=600,000-567,278.80$
= \$32,721.20
(e) Lender's share of premium $=s \mathrm{XfX}$ b**

$$
\begin{aligned}
& =.005(2.7467)(567,278.80) \\
& =\$ 7,790.72
\end{aligned}
$$

${ }^{* \star}$ To the extent that such amount does not exceed the difference between (i) the total premium and (ii) $1 \%$ of the amount to be applied to the UPB of the loan.
(f) Fannie Mae's share of premium $=\$ 32,721.20-\$ 7,790.72$
$=\$ 24,930.48$

EXAMPLE OF YIELD MAINTENANCE CALCULATION IN CONNECTION WITH A PARTIAL PREPAYMENT (APPLICATION OF LOC PROCEEDS) FOR NOTE VERSIONS AS OF 04/2003

GIVEN:
(1) Maturity Date $=$ 6/1/2013
(2) Yield Maintenance End Date $=$
(3) Note Rate $=$ " c " $=\quad 5.600 \%$
(4) Servicing Fee = " s " = 0.390\%
(5) Fannie Mae Pass-through Rate = "p" = 5.210\%
(6) Amount of Partial Prepayment $=$ " $\mathrm{b} "=\quad \$ 635,000.00$
(7) Effective Date of partial prepayment ${ }^{\star}=\quad 3 / 31 / 2010$
(8) Yield on Pre-selected Treasury Security** $=$ " $\mathrm{r} "=\quad 2.080 \%$
*Must be last day of a month
**As reported in The Wall Street Journal on the twenty-fifth Business Day preceding the intended to prepayment date.

THEN:
(a) Remaining Yield Maintenance Period (in months) $=$ "n"

Yield Maintenance End Date - Effective Partial Prepayment Date =

32 months
(b) Present value factor $=$ " $\mathrm{f} "$

$$
=\underline{1-(1+r)^{-n / 12}}
$$

2.57
$r$
(c) Prepayment Premium due from Borrower = "t"
$=(c-r) \times f \times b$
$\$ 57,403.82$
or
$1 \%$ of the Partial prepayment
$=.01 \times$ b
\$6,350.00
whichever is greater
greater of $(\$ 556,982.37$ or $\$ 61,613.29)$
$\$ 57,403.82$
(d) Lender's Share of Premium** $=$ " l "
$=s \times f \mathrm{Xb}$
**To the extent that such amount does not exceed the difference (i) $t$ and (ii) $1 \%$ of the UPB.
(e)

Fannie Mae's Share of Premium =

$$
=t-1
$$

