```
AA A , .
```

```
! "#$%&'(#)*'+,$-.$/0)-&$$ $$12234$567895: |: $$$ $$$
                                                                                  $$$
! " ##$%&'() *+&+) %'
                                ! "#$%&&#"'(! "#$%&'(#)*'+,$-.$/0)-&$
; <=$737>8$?)#*#&+$$
                                @#A)-&$B<C#*$; <C'=,$; -D&E<+'-&$FG''--$-.$HEDG<+'-&$
                                ) &&#*+, -%(| "#$%&&#"'(! "#$%&'(#)*'+,$-.$/0)-&$
; <=$73>18$FJ)'&K$737>((
                                LD))'GD=DC$<&E$M&*+)DG+'-&<=$F+DE'#*$
                                @#A)-&$B<C#*$; <C'=,$; -D&E<+'-&$L-=#K#$-.$HEDG<+'-&$
                                ) &&+&-, . -(! "#$%&&#"'(! "#$%&'(#)*'+,$-.$/0)-&$
; <=$733N8FJ)'&K$73>I$$
$
                                LD))'GD=DC$<&E$M&*+)DG+'-&<=$F+DE'#*$
       $
                $
$
       $
                        $
                                L-=#K#$-.$HEDG<+'-&$ $
/+O12+O1-(#$(3%&4#. &+5+2+-+%&((
   ! "#$%&' #() * #+, -). /O 1 )O23%, &"' -)4$-&$#)56789:; #$<$-&=)
   >"%$)4?, "#()@, %3A&B)<$-, &$)5678C:6768=)
    . $%3#$2)' D$#)EF(777(777)2' M, #<)"-)$G&$#-, A)@3-2"-H)@' #)%' M, +' #, &"D$)#$<$, #%?I))
```

! 234565'&7389:'

6", 78, -%(9: +. 7+*, -%&(*#8"&%&(7%; %2#4%7(#"(< , =#"("%; +&+#. &>(

:: 330: 73P\$ /E(<&G#E\$M&*+)DG+'-&<-\$! #G''&'QD#*0\$FG'#&G#\$

::3309>5\$\$ M&*+)DG+'-&<=\$<&E\$R<&<K#C#&+\$?)<G+'G#*\$

::3309>6P\$\$F#C'&<)0\$@'G#&*D)#\$'&\$LD))'GD=DC\$<&E\$M&*+)DG+'-&\$

:: 330: 25\$ H&K'&##)'&K\$.-)\$HEDG<+-)*\$

::330:23S:2>\$L='&'G<\$! #<G'''&K\$M\$<&E\$MM\$1FG''--\$T<*#E\$?)<G+'GDC4\$

::330693P\$

```
R<00'\$X\$1733N4\$qU#*#<)G'''&K\$! #<G''#)*\$HhJ#)'#&G#*\$W'+''\$F! F\$/\$^#W#,<&\$?#)*J#G+'(#i]\$?<J#)\$
J)#*#&+#E$<+$+''#$R'EW#*+#)&$HEDG<+'-&<-$U#*#<)G''$/**-G'<+'-&$1RVHU/4\$L-=DCAD*\$` '\\$
 G+-A#)Y$733N]$
V#\&E##$?]Y$Z#G0=#)Y$V]Y$R<00'Y$X]Y$HCG''Y$U]Y$@#<.K)#&Y$F]Y$<&E$V-i&-W*0'Y$^]$1733N4$q^<+<$
! ''#)<J,($`D)$HhJ#\'#&G#*$'&$<$^'**#)+<+'-&$F+DE,$d)-DJi]$?<&#-$J)#*#&+<+'-&$<+$+''#$R'EW#*+#)&$
HEDG<+'-&<=$U#*#<)G''$/**-G'<+'-&$1RVHU/4\$L-=DCAD*\$` ''\$` G+-A#)\\$733\\]$
J)#*#&+#E$<+$+''#$/&&D<=$R##+'&K$-.$+''#$X<+'-&<=$/**-G'<+'-&$-.$U#*#<)G''$'&$FG'#&G#$! #<G'''&K$
J)#*#&+#E$.-)$+''#$/**-G'<+'-&$.-)$+''#$HEDG<+'-&$-.$! #<G''#)*$\&$FG'#&G#$1/H! F4$L-&.#)#&G#$\&$
L=-)<E-$FJ)'&K*\\\$L`\\\$B<&D<\),\\$733:\\\$
^<W&$-.$+''#$X#W$F#GD)'+,$F+<+#]i$?<J#)$J)#*#&+#E$<+$+''#$/&&D<=$R##+'&K$-.$+''#$/C#)'G<&$
HEDG<+'-&<$U#*#<)G''$/**-G'<+'-&$1/HU/4\$R-&+)#<=\$L<&<E<\\$/J)'$733: \$
! #<G''#\*$<A-D+$FG'#&G#$<&E$F-G'#+, i |$?\)#*#&+<+'-&$<+$+''#$X<+'-&<=$FG'#&G#$! #<G''#\)*$/**-G'<+'-&$
1XF! /4$L-\&.#)#&G#$'&$?'''=<E#=J'''<Y$?/Y$R<)G''$7332]$
(#$*$%&, &+) %*'>+E@A:6CD'
Q, AA+'(R$'(?<G''&-W0*'\$@\$F<)+-)\\$D\\\$\$C''<&K\\\$\\]$! #<G'''&K\\$R<+''\$<&E\\$FG'\#&G\\\$\+-\\$H&K='*'\\$
@<&KD<K#$@#<)&#)*]$FM`?$F+)<+#K'#*$<&E$/G<E#C'G$@<&KD<K#]$V-)0*''-J$J)#*#&+<+'-&$<+$LRF^]$
/J)'\(\(\frac{1}{3}\)\)
?)#*#&+<+'-&$<+$+"#$F&-W.=<0#$F! H/R$L-&.#)#&G#$<+$R<=-&#$%&'(#)*'+,\$L<&+-&\$` '''-\$; #A)D<),$
73>6]$$
```

```
Z#=.#)YSL]YSL<('GG'''YS)|YSLD+)'K''+YS||YSD<)<.-=-YSX]YS\SR<00'YSX]ST)'EK'&K$H&K'&##)'&KYSFG'#&G#YS<&ES
! #G''&-=-K,$1THF! 4$R#&+-)'&K$?)-K)<C]$FDAC'++#E$+-$+''#$X<+'-&<-$FG'#&G#$; -D&E<+'-&$/MF@$
?)-K)<C$1XF; $V]B]YZ>$$X-(#CA#)\$73>9\$X`!$; \%X^H^\$$
Z = E<, YSO]YSH(<&*SH]YSR<00'YSX]YS<&E$??<G''&-W*0'Y$@]$
                                                                                           ]$
\label{eq:fdac'++} \begin{split} \text{FDAC'++}\#\text{SX<+'-}\&<&\text{SFG'}\#\&G\#\$; -D\&E<+'-\&\$X^ eLH\$?)-K)<&\text{C$1>78:} \ 794V\$m>Y>55V5I>]\$X^ !\$ \end{split}
: %X^H^$
$
       @#<E$H(<=D<+-)Y$
                                                                                         Y$XF; $
       XU! Y$17377873764$
       ?)-j#G+$H(<=D<+-)Y$
                                                             Y$XF; $; D&E#EY$1737>873724$
       ?)-j#G+$H(<=D<+-)Y$
                                                           Y$^#G#CA#)$73738$X-(#CA#)$737>$
       1=-G<=$\#(<=D<+'-&4]$$
       ?)-i#G+$H(<=D<+-)Y$
                                                                                        . - )$<$
       L < \# \$'\&\$H&K'\&\##\)'\&K\$\/G\<E\#C'\<\\$\XF\;\$\;D\&E\#E\\$\CD=+'\8D\&'\(\#\)\*'+\$\J\)-\$\#\$\$173>6873774\$
       ?)-j#G+$H(<=D<+-)V$F+<+#$@'A)<),$-.$`"'-$@F!/$F!HR$d)<&+V$/0)-&$?DA='G$FG''--=*$1737>4$
       E\#(\#=-JC\#\&+V)QD<='+<+'(\#\&E<+<\&G=\#G+'-\&\&<\&E\&<&<=,*'*V)\#J-)+\&W)'+'\&K]
       L-=<A-)<+'(#$#(<=D<+'-&$$L<&+-&$L'+,$FDCC#)$?)-K)<C]$L-8#(<=D<+-)$$QD<='+<+'(#$E<+<$
       ?DA='G$FG'' - -=*48$FDCC#)S; <=$73>6$
       ?)-j\#G+\$H(<=D<+-)(\$L<CJ\$V''<+\$M.\$*DCC\#)\$J)-K)<C\$1!-C!-E4\$8\$L<&+-&\$\`Z\$[\$73>9\$
       L+\&\&\%"-,-+\#. (D# < <+--\%(\Q\% < 5\%"(9+. (4"\#0"\%&&>\$((
       L, &+ ''' < e - E#) $ [ M&+#K) < +#E T' - *G' # & G#$?'' ^$? - K) < C$$
(
       L+&&%"-,-+#. (D1,+"C
```

^'<&#\$T)-W&\$1E'**#)+<+'-&\$G-CC'++##\$C#CA#)V\$G-CJ=#+#EV\$73>94\$ T)'K#++#\$_<'*#)\$1E'**#)+<+'-&\$G-CC'++##\$C#CA#)V\$G-CJ=#+#EV\$73>I4\$

- o FG'#&G#\$HEDG<+'-&\$L-D&G'=\$-.\$`'''-\$
- o /**-G'<+'-&\$.-)\$FG'#&G#\$! #<G''#)\$HEDG<+'-&\$1/F! H4\$
- o R'EW#*+#)&\$HEDG<+'-&<=\$U#*#<)G''\$/**-G'<+'-&\$1RVHU/4\$
- O M&+#)&<+'-&<=\$F-G'#+,\$.-)\$! #G''&-=-K,\$'&\$HEDG<+'-&\$1MF! H4\$