```
!"#$%&$%'()"*+,-&%.//)O.+
1 %)()"*+)"($+(2.+34"//%$$5++
6$7*+8$749+:+
, 5)4;+<$$0.%!
"#$%&'$()!*#+,-.!/#-'#0!
1,2!34! z! 3554!
=)44)'"+>%)?@.44A>$@4./B+
C.%)./+,?)($%+
```

```
!''#$%&$%'()''*+,-&%.//)0.+
1 %)()"*+)"($+(2.+34"//%$$ 5 ++
+
6$7*+8$749+:+
, 5)4;+<$$0.%!
"#$%&'$()!*#+,-.!/#-'#0!
1,2!34! z! 3554!
=)44)'''+>%)?@.44A>$@4./B+C.%)./+,?)($%+
<$44;+=)((4.D).4?B+,?)($%
```

Ŧ

`\$>QE@SE@=K;>H!&\_S@CFF;LC!U@;K;>H!;>KE!KIC!5<=FF@EEMa!;>LCFK;H=KCF!KIC!

CGGCQK;LC>CFF!EG!`=QK;LC!<C=@>;>Ha!FK@=KCH;CF8!S=@K;QT<=@<O!FIE@K!B@;K;>H!=QK;L;K;CF8!BI;QI!

IC<S!FKTAC>KF!KE!M=VC!KIC;@!KIETHIK!S@EQCFFCF!L;F;P<C6!!!&M;<O!3EELC@!=>A!2ETH!,ET<V!

<=PC<!KICFC!;>DQ<=FF!=QK;L;K;CF!`C\_S@CFF;LC!B@;K;>Ha!=>A!S@EL;AC!M=>O!TFCGT<!C\_=MS<CF!EG!

KIC!B=OF!B@;K;>H!Q=>!PC!TFCA!;>!<=@HC8!<CQKT@CDP=FCA!Q<=FF@EEMF6!!)IC;@!G;>A;>HF!;>A;Q=KC!

KI=K!FKTAC>KF!BIE!C>H=HCA!;>!KIC!B@;K;>H!K=FVF!=FVCA!ME@C!>TMC@ETF!=>A!KIETHIKGT<!

^TCFK;E>F!;>!Q<=FF!=>A!SC@GE@MCA!PCKKC@!E>!QEMS<C\_!C\_=M!^TCFK;E>F6!'CFT<KF!FTQI!=F!KICFC!

PEAC!BC<!GE@!`B@;K;>HD;>KC>F;LCa!Q<=FFCF6!

) I;F!FKTAO8!KEHCKIC@!B;KI!E>HE;>H!5C>KC@!S@EbCQKF8!FIET<A!@CFT<K!;>!;MS@ELCA!

T>AC@H@=AT=KC!B@;K;>H8!KIC!5C>KC@cF!S@;M=@O!HE=<6! . <E>H!B;KI!QE<<E^T;=8!QE>GC@C>QCF8!

STP<;Q=K;E>F8!=>A!EKIC@!ETK@C=QI!=QK;L;K;CF8!KIC!5C>KC@!=>>T=<<O!GT>AF!@CFC=@QI!S@EbCQKF!PO!

">;LC@F;KO!EG! - ;>>CFEK=!G=QT<KO!BIE!FKTAO!=>O!EG!KIC!GE<EB;>H!KES;QFd!

e!QI=@=QKC@;FK;QF!EG!B@;K;>H!=Q@EFF!KIC! ">;LC@F;KOcF!QT@@;QT<TMR!

e!FK=KTF!@CSE@KF!E>!FKTAC>KFc!B@;K;>H!=P;<;KO!=>A!KIC!">;LC@F;KOR!

e!KIC!QE>>CQK;E>F!PCKBCC>!B@;K;>H!=>A!<C=@>;>H!;>!=<<!G;C<AFR!

e!KIC!OI=@=OKC@;FK;OF!EG!B@;K;>H!PCOE>A!KIC!=O=ACMOR!

e!KIC!CGCQKF!EG!CKI>;Q;KO8!@=QC8!Q<=FF8!=>A!HC>AC@!E>!B@;K;>HR!=>A!

e!QT@@;QT<=@!@CGE@M!KI@ETHI!B@;K;>HD;>KC>F;LC!;>FK@TQK;E>6!

U C!=@C!S<C=FCA!KE!S@CFC>K!KI;F!KCQI>;Q=<!@CSE@K!=F!S=@K!EG!KIC!E>HE;>H!A;FQTFF;E>!

=PETK!B@;K;>HDKED<C=@>!;>!KIC!Q<

## !"#\$%&\$%'()"\*+,-&%.//)0.+1%)()"\*+!"(\$+(2.+34'//%\$\$5+

`,=QKF!=@C!FKTS;A!KI;>HF!T>K;<!P@ETHIK!;>KE!QE>>CQK;E>!B;KI!FEMC!HC>C@=<!<=B6a!
! 1ET;F!.H=FF;g!hX[40D0\i8!7@EGCFFE@!EG!#=KT@=<!3;FKE@O8!3=@L=@A!">;LC@F;KO!

5 I=>QCF!=@C!OETcLC!PCC>!KC=QI;>H!GE@!FEMC!K;MC!>EB&!=>A!SC@I=SF!KIC@C!=@C!

$$\begin{split} &\texttt{KI}; \texttt{>} \texttt{HF}! \texttt{OET}! \texttt{<}; \texttt{VC}! \texttt{=} \texttt{PETK}! \texttt{OET}@! \texttt{KC} \texttt{=} \texttt{QI}; \texttt{>} \texttt{H}! \texttt{FKO} \texttt{<} \texttt{<}! \texttt{=} \texttt{>} \texttt{A}! \texttt{KI}; \texttt{>} \texttt{HF}! \texttt{OET}! \texttt{BET} \texttt{<} \texttt{A}! \texttt{<}; \texttt{VC}! \texttt{KE}!; \texttt{MS}@ELC! \texttt{TSE} \texttt{>} \texttt{6}! \text{, E}@! \\ &\texttt{C}_{\texttt{=}} \texttt{MS} \texttt{<} \texttt{CS}! \texttt{I} \texttt{=} \texttt{LC}! \texttt{OET}! \texttt{CLC}@! \texttt{GC} \texttt{<} \texttt{K}! \texttt{K}! \texttt{M} \texttt{=} \texttt{>} \texttt{O}! \texttt{E} \texttt{G}! \texttt{OET}@! \texttt{FKTAC} \texttt{>} \texttt{KF}! \texttt{b} \texttt{TFK}! \texttt{AE} \texttt{>} \texttt{cK}! \texttt{HCK}! \texttt{C} \texttt{>} \texttt{ETHI} ! \texttt{ETK}! \texttt{E} \texttt{G}! \texttt{OET}@! \\ &\texttt{<} \texttt{CQKT@CF8}! \texttt{CLC} \texttt{>} ! \texttt{OET}@! \texttt{PCFK}! \texttt{E} \texttt{>} \texttt{CF} \texttt{j} ! \texttt{1} \texttt{CQKT}@; \texttt{>} \texttt{H}!; \texttt{F8}! \texttt{E} \texttt{G}! \texttt{QET}@\texttt{FC8}! \texttt{=} \texttt{>} !; \texttt{MSE}@K \texttt{=} \texttt{>} \texttt{K}! \texttt{KEE} \texttt{<}!; \texttt{>} ! \end{split}$$

QEMMT>;Q=K;>H!=!<=@HC!=MET>K!EG!M=KC@;=<!;>!=!FIE@K!=MET>K!EG!K;MC8!=>A!MEFK!;>FK@TQKE@F!

FEMCKI;>H!OET!S0EP=P<0!AE!CLC00!A=0!;>!KIC!QET0FC!EG!OET0!0CFC=0QI8!QEMSEF;K;E>8!=>A!

S<=>>;>H!S0EQCFFCF6!?C0HI=HC!hXYYXi!VCSK!=!0CQE0A!EG!I;F!B0;K;>H!GE0!=!KBEDBCCV!SC0;EA!

=>A!GET>A!KI=K!GT<<0!Z4 1 !QE>F;FKCA!EG!S=SC0!0CL;CBF!GE0!I;F!EB>!TFC8!=>A!<CQKT0C8!<=P8!=>A!

<;P0=00!>EKCF6!) ICFC!KOSCF!EG!B0;K;>HF!QE>K=;>!EPFC0L=K;E>F8!=>=<OFCF8!=>A!;>F;HIKF!

;>KC>ACA!GE0!KIC!=TKIE0cF!EB>!TFC!E0!SC0I=SF!GE0!FI=0;>H!B;KI!=!K0TFKCA!=TA;C>QC6!) I;F!;F!

BI=K!C\_S0CFF;LC!B0;K;>H!;FmEPFC0L=K;E>F8!=>=<OFCF8!=>A!;>F;HIKF!ACF;H>CA!GE0!=!B0;KC0cF!

SC0FE>=<!TFC6!

1 CKcF!F=O!OET!=@C!@CL;CB;>H!KIC!<;KC@=KT@C!B;KI;>!=!FSCQ;G;Q!=@C=!EG!;>KC@CFK!=>A!OET!

HCK!=!FTAAC>!;AC=!GE@!GT@KIC@!C\_S<E@=K;E>6! \* ET!B@;KC!;K!AEB>!FE!OET!AE>cK!GE@HCK8!@;HIKj!

1 = KC@8!OET!G<CFI!ETK!KI=K!;AC=8!bEKK;>H!AEB>!FEMC!SEFF;P<C!B=OF!KIC!>CB!;AC=!@C<=KCF!KE!

@CFC=@QI!OETcLC!=<@C=AO!QE>ATQKCA8!KIC>!ETK<;>C!=!SEFF;P<C!MC=>F!GE@!KCFK;>H!OET@!

IOSEKICF;F6!) I=KcF!C\_S@CFF;LC!B@;K;>H6! \* ET!TFCA!C\_S@CFF;LC!B@;K;>H!KE!M=VC!=!QE>>CQK;E>!

PCKBCC>!BI=K!OET!BC@C!@C=A;>H!=>A!KI=K!BI;QI!OET!=<@C=AO!V>CB6!&\_S@CFF;LC!B@;K;>H8!

KIC>8!;F!=!MC=>F!EG!M=V;>H!QE>>CQK;E>F!PCKBCC>!KIC!V>EB>!=>A!KIC!>CB!E>!S=SC@6!!

#EB!<CkcF!F=O!KI=K!OET@!;AC=!<CA!KE!@CFC=@QI8!KIC!@CFT<KF!EG!BI;QI!OET!;>KC>A!KE!

STP<;FI!;>!=!SCC@D@CL;CBCA!bET@>=<R!OET!V>EB!KI=K!EKIC@F!B;<<!@C=Am=>A!bTAHCmOET@!

BE@V6!) IC@CGE@C8!OET!M=VC!QC@K=;>!KI=K!>E!T>C\_S<E@CA!;AC=F!ESC>!KE!FC@;ETF!QI=<<C>HC!

@CM=;>R!OET!E><O!B@;KC!BI=K!OET!=@C!QC@K=;>!OET!V>EB6!) I;F!KOSC!EG!B@;K;>H!;F!;M

!!!!M=O!I=LC!QE>QC@>;>H!<CQKT@CF8!S@EbCQKF8!E@!@C=A;>H!M=KC@;=<FR!
\i!&>QET@=HCF!GCCAP=QV!PCKBCC>!;>A;L;AT=<!FKTAC>KF!=>A!KIC!;>FK@TQKE@6!
\$G!BC!Q=>!EPK=;>!FTQI!A@=M=K;Q!@CFT<KF!G@EM!FTQI!MEACFK!MC=>F8!BC!I=LC!>E!C\_QTFC!GE@!
>EK!;>QE@SE@=K;>H!KICM!;>KE!ET@!Q<=FFCF6!

## >LE+<H 1+3 JF+!+Q JR ,+!E+1 HGR+8HG+QK+3=JCCP+ HIE!HFC+8HG+!F6!S!6LJ=+C!ELJE!HFC+



+SK:E>F!GE@!M=V:>H!:K!BE@Vd!

Xi!!\*ET!Q=>!I=LC!KIC!Q<=FF!B@;KC!=K!KIC!PCH;>>;>H8!KIC!C>A8!E@!ETKF;AC!!
!!!!!!E@!Q<=FF8!ACSC>A;>H!TSE>!OET@!S@CGC@C>QCF!=>A!QE>FK@=;>KF@!
/i!!2CSC>A;>H!TSE>!Q<=FF!F;gC!=>A!K;MC!QE>FK@=;>KF@!I=LC!KIC!Q<=FF!!
!!!!!MCCK!;>!FM=<<!H@ETSF!KE!A;FQTFF!KIC;@!B@;K;>H!=>A!KE!HC>C@=KC!!
!!!!!^TCFK;E>F!GE@!Q<=FF!A;FQTFF;E>6!
/i!UIC>!SEFF;P<C8!IE<A!=!Q<=FF!A;FQTFF;E>!E>QC!=!B@;K;>H!K=FV!I=F!PCC>!!!!!!!!!!!!
QEMS<CKCA6!
:i!\$>!<=@HC@!Q<=FFCF8!C>QET@=HC!FKTAC>KF!KE!<C=LC!^TCFK;E>F!;>!=!PE\_!S<=QCA!;>!
KIC!Q<=FF@EEM8!KIC>!=>FBC@!=F!M=>O!^TCFK;E>F!=F!SEFF;P<C!=K!KIC!PCH;>>;>H!E@!
C=QI!Q<=FF!FCFF;E>6!
!9i!JCCS!CL=<T=K;E>!E@!C\_S@CFF;LC!B@;K;>H!KE!=>!=PFE<TKC!M;>;MTM8!BI;<C!
@C^T;@;>H!S=@K;Q;S=K;E>!KI@ETHI!S=FFDG=;<!H@=A;>H!;>!BI;QI!KIC!K=FV!>EKCPEEV!
;F!MC@C<O!FQ=>>CA!KE!LC@;GO!=KKC>K;E>!KE!KIC!=FF;H>CA!KES;QF6+

) IC!TFC!EG!=>!=QK;LC!<C=@>;>H!FK@=KCHO!>CQCFF=@;<O!@CATQCF!KIC!K;MC!OET!I=LC!KE!

QELC@!M=KC@;=<!;>!<CQKT@C6! 3 EBCLC@8!, T<B;<C@!hXY[Oi!=>A!EKIC@F!I=LC!FTHHCFKCA!KI=K!

CATQ=K;E>=<!=SS@E=QICF8!BI;QI!C>=P<C!FKTAC>KF!KE!FO>KICF;gC!M=KC@;=<!GE@!KICMFC<LCF8!

!

;>Q@C=FC!

E" #\$%\d'"()\*"+

:)2\$.9\$.(11.\$\$?""

" #\$%&'"()\*"+\$\$,-."

 $; \mathbf{MMCA}; = \mathbb{KC} < 0! = \mathbb{KC} @ ! \mathbb{KIC} ! \mathbb{C} = \mathbf{M6} ! \mathbb{G} ! \mathbb{CCQ} \mathbb{KE} ! \mathbb{TFC} ! \mathbb{TQI} ! = ! \mathbf{MC} \mathbb{KIEA8} ! \mathbb{BET} < A! \mathbb{B} = \mathbb{K} ! \mathbb{KE} ! \mathbb{EE} ; \mathbb{GO} ! \mathbb{KIC} ! \mathbb{EE} !$ 

 $/i! 17 - "2\$? 9 (.-"()*"2\$) /. (1/"/(1'!;F! \texttt{KIC!C}_=\texttt{M}; >= \texttt{K}; E>! E 9 ! \texttt{KBE!E} 9 ! \texttt{ME} @ C ! Q E> Q C S \texttt{KF!} + Q @ E S F 8 ! ! ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 ! E 9 !$ 

S@EQCAT@CF8!SIOF;E<EH;Q=<!S=KIB=OF8!CKQ6i!F;AC!PO!F;AC6!

 $\underline{\&\_=MS < C} \texttt{d!} \texttt{)} \texttt{E:} \texttt{GE} < \texttt{EB}! = !< \texttt{CQ} \texttt{KT} @ \texttt{C!E} > ! \texttt{K} \texttt{IC!} \texttt{ME} @ \texttt{S} \texttt{IE} < \texttt{EHO}! = > \texttt{A!S} \texttt{IOF}; \texttt{E} < \texttt{EHO}! \texttt{EG!} \texttt{S} < = > \texttt{K!} \texttt{PT} < \texttt{PF} \texttt{d!!}$ 

`&\_S<=;>!KE!OET@!>E>DFQ;C>K;FK!T>Q<C!KIC!A;GGC@C>QCF!=>A!F;M;

*G!*"

#\$%\(\'\)\\*"+\$\$, -."

9i!*I7-"0*) M\$. ? (&"0), -) \( 0\) \( 0\) \( 1'\)!;F!F;M;<=@!KE!KIC!GE@M=<!;>LC>K;E>!K=FV8!PTK!;F!ME@C!!

S<=OGT<<O!Q@C=K;LC6!\$K!;F!ACF;H>CA!KE!C>QET@=HC!OET@!FKTAC>KF!KE!FM;<C8!@C<=\_!=>A!!

SC@I=SF!FK

GA" #\$%\d'"()\*"+\$\$,-."

!

 $? CQ=TFC!S@CL;ETF!C\_SC@;C>QC!I=F!PCC>!T><;VC<O!KE!S@CS=@C!OET@!FKTAC>KF!GE@!=QK;LC!\\ <C=@>;>H!FK@=KCH;CF8!;>Q<TA;>H!C\_S@CFF;LC!B@;K;>H8!KICO!M=O!@C^T;@C!C\_KC>F;LC!HT;AC<;>CF!=K!\\ KIC!PCH;>>;>H!EG!KIC!KC@M6!) I;F!;>GE@M=K;E>!FIET<A!;>Q<TACd!$ 

Xi! . >!C\_S<=>=K;E>!EG!bTFK!BI=K!C\_S@CFF;LC!B@;K;>H!;F!=>A!;F!>EK8!=>A!BIO!OET!!

PC<;CLC!;>!;K!=>A!@C^T;@C!;K6!

EG!!B@;K;>H8!>EK!;>!KIC!=PFE<TKC!QE@@CQK>CFF!EG!KIC!@CFT<K6!

 $i!\&_=M$ 

 $FCC! \\ \texttt{KI} = \texttt{K!KICO!} \\ \textbf{I} = \texttt{LC!} = \texttt{!@E<C!}; \\ \texttt{!KIC}; \\ \texttt{@!EB} > \texttt{!CATQ} = \texttt{K}; \\ \textbf{E>6!} \\ \textbf{.} \\ \texttt{!F=MS<C!} \\ \textbf{I} = \\ \textbf{AETK!} \\ \texttt{GE@!KIC!G}; \\ \texttt{@FK!A=O!EG!} \\ \textbf{.} \\ \texttt{ISP} = \texttt{MS} \\ \textbf{.} \\ \texttt{ISP} =$ 

" #\$%\d'"()\*"+\$\$,-."

## 1 HGRC+3!E, 6!

!!

!

! ! ! ! ! ! ! # # # JII, F6!T+J+

CJQI = , + < JF6HLE + 8HG + E < , + 8!GCE + 6JK + H8 + 3 = JCC + 6JK + 16JCE + 16JCE

!

K;MC!KE!A;FQTFF!OET@!^TCFK;E>F!;>!Q<=FF!PCGE@C!PCH;>>;>H!=!>CB!
<CQKT@C!KES;Q6!

**1** .+ **1** )44+*UVIK*0! Xi!H@=AC!OET@!B@;K;>H6!

/i!CL=<T=KC!OET@!=P;<;KO!KE!B@;KC!QEIC@C>K!FC>KC>QCF8!FSC<<!E@!

ST>QKT=KC!S@ESC@<O8!E@!CLC>!HCK!OET@!G=QKF!FK@=;HIK6!!V%."0)/-)/0\$)"

01")\$/"/\$"/-(27"8\$%"7\$4"/\$"4.0/-\"\*ET!=@C!KI;>V;>H!=>A!B@;K;>H!GE@!

8\$%.1-\\S">EK!GE@!TFo!

1 .+ 1 )4N! Xi+'C^T;@C!OET!KE!VCCS!OET@!B@;K;>HmQE<<CQKCA!;>!=!PET>A!

>EKCPEEV!B;KI!=<<!B@;K;>HF!\*(/-\*"=>A!;>!27.\$)\$&\$502(&"\$.\*-.@!

/i!5E<<CQK!BE@VPEEVF!E>QC!AT@;>H!KIC!^T=@KC@!h=SS@E\_;M=KC<O!BCCV!!

!

 $\label{eq:control_in_control_in_control} $$ \ i6!+>! \ iC!A=O!EG! \ iC!G;>=<!C_=M8!BC!B; <<!QE<<CQK!BE@VPEEVF!GE@! $$$ 

 $CL = \langle T = K; E > 6!! U E@VPEEVF!B; \langle \langle !PC!@CKT@>CA!KE!OET!PO!KIC!C>A!EG!$ 

FS@;>H!^T=@KC@8!XYY/6!

\i!?=FC!OET@!G;>=<!H@=AC!TSE>!OET@!S=@K;Q;S=K;E>6!!\$G!BC!bTAHC!OET!

KE!I=LC!M=AC!=>!IE>CFK!CGGE@K!KE!SC@GE@M!KIC!B@;K;>H!K=FVF8!BC!B;</!

@CS<=QC!=>EKIC@!H@=AC!hTS!KE!X4 1 !EG!KEK=<!H@=AC!Q@CA;KFi!B;KI!Q@CA;K!

GE@!=>!n.c6!

!