. B'%?C386?'2<D8678D!

- 608!! B%'!=\$.0*()!(1,\$C*\$,I!,+1=0PC-!(!F2+.\$C2!<\$.0*()!Q\$'HM*(2\$!6F<08!,0-C\$.!1K!(!)0*\$C,\$.! =\$.0*()!%'!=\$C2()!#\$()2#!G'(*HH%C\$'!2%!2#\$!R*(.\$=0*!Q%+C,\$))0C-!%L*\$!%0!2#\$0'!B(*+)2K!%0! S\$-0,2'(H%CI!
- 6008!! F+1=0PC-!(GG'%G'0(2\$!. %*+=\$C2(H%C!0%'!C%CU=\$.0*()!(1,\$C*\$,!2%!2#\$!R*(.\$=0*!Q%+C,\$))0C-! %L*\$!0C!2#\$0'!B(*+)2K!%0!S\$-0,2'(H%CI!

V%2\$!2#(2!0C!())!*(,\$,I!,2+.\$C2,!('\$!'\$N+0'\$.!2%!*%C2(*2!2#\$0'!0C,2'+*2%',!/02#0C!9D!#%+',!%0!2#\$!\$C.!%0! 2#\$!G\$'0%.!*%&\$'\$.I!+C)\$,,!%2#\$'/0,\$!0C,2'+*2\$.!0C!2#\$!*%+',\$!%+2)0C\$T!

F2+. \$C2,!,#%+). !(),%!C%2\$!2#(2!0C. 0&0. +()!0C,2'+*2%',!('\$!C%2!G\$'=0W\$. !2%!'\$*\$0&\$!. %*+=\$C2(H%C! .0'\$*2)K!0'%=!(!,2+. \$C2!!/#\$2#\$'!0C!,+GG%'2!%0!(C!(GG)0*(H%C!0%'!*%C,0. \$'(H%C!%C!=\$.0*()!-'%+C.,1!%'! 0%'!%2#\$'!'\$(,%C,T!!2>'3;7CF86?5G;6':8LC=:83'E;:'5<D8678D'?N5?'5:8'6;?'7;48:83'<@'?N8'%8*E1\$8U;:?83' 2<D8678'9; >7@'FCD?'<8'DC<F=V83'?;'?N8'27538F=7'!;C6D8>=6W'; X78';E'5'D?C386?VD'Z;F8',57C?@!

B%'!2#\$!G%)0*K!%C!R*(.\$=0*!Q%C,0.\$'(H%C!0%'!F2+.\$C2!R1,\$C*\$,!X!YC.\$'-'(.+(2\$!F2+.\$C2,!0C!B0',2!>C2'K! Z'%-'(=,I!,\$\$3!

#WG,3[[///I+/%I*([+C0&,\$*[G.0[(*(.\$=0*\G%)0*0\$,[(GG\$(),[(**%==%.(H%C\0))C\$,,IG.0!!

(C. !0%'!2#\$!F2+. \$C2!<\$. 0*()!Q\$'HM*(2\$!6F<Q8!!,\$\$3!

#WG3[[///T+/%T*([+C0&, \$*[G. 0[(*(. \$=0*\G%)0*0\$, [(GG\$(), [=\$. 0*()0%'=TG. 0T!!!

\$8>=W=; CD'277; FF; 35G; 6!

] #C!($!*\%+', \$!'\$N+0'\$=\$C2!*\%C^0*2, !/02#!(!'\$)0-0\%+, !#\%)0.$ (K!2#(2!'\$N+0'\$, !(C!(1, \$C*\$!0'%=!2#\$!YC0&\$', 02K!%'!G'%#0102, !*\$'2(0C!(*H&0H\$, !!, 2+. \$C2, !, #%+).!'\$N+\$, 2!(**%==%. (H%C!0%'!2#\$0'!(1, \$C*\$!0C!/'0HC-!(2!) $\$(, 2!2/\%!/\$\$_, !G'0\%'!2\%!2#\$!#\%)0.$ (K!2%!2#\$!*%+', \$!0C, 2'+2%'!(C. [%'!2#\$!R*(. <math>\$=0*!Q%+C, \$))0C-!%L*\$!%0!2#\$0'!B(*+)2K!%0!S\$-0, 2' (H%CI!!Z)\$(, \$!*%C, +)2!YC0&\$', 02K', !)0, 2!%0!'\$'%-C05\$.!'\$)0-0%+, ! #%)0. (K, !6+G. (2\$.!(CC+())K8!(2!!

#WG,3[[=+)H*+)2+'()*()\$(()9.30.5(F(H)Ij EIQEMCq100171.85204.3277c.4(.)-0.4(()9.3.3(ti)IQ/Span<</Act)

 $d\%+!=(K!(),\%!1\$!\$)0-01)\$!2\%!/'02\$!2\#\$!FG\$*0()!>?(=!00!K\%+!('\$!0C!(!e<+)HG)\$!>?(=!F02+(H\%Cf!6,\$\$!\#WG3[[///T'$-0,2'('T+/\%T*([$?(=0C(H\%C,[$?(=\backslash,*\#\$.+)$T#2=)8T!$

 $\label{eq:Q} Q\% = G \ H\%C!\%0!2\#0, !*\%+', \$! \ne 0) \ !'\$N+0'\$!K\%+!2\%!\#(\$\$!(!'\$)0(1)\$!0C2\$'C\$2!*\%CC\$*$

F2+. \$C2!R**\$, ,010)02K!F\$'&0*\$,!6FRF8!(2!67AE8!uuAU9ADg!00!K%+!#(&\$!(CK!N+\$,H%C,!'\$-('.0C-!)(**%==%.(H%C,I!

] \$,2\$'C!YC0&\$',02K!0,!*% = =0W\$.!2%!(!2#'0&0C-!*(=G+,!(,!/\$!.\$)0&\$'!%+'!*%+',\$,!0C!2#\$!=0?\$.!=%.\$)!%0!1%2#!&0'2+()!(C.!0(*\$U2%U0(*\$!0%'=(2,T!] \$!\$C*\%+'(-\$!K\%+!2\%!*#\$*_!\%+2!2#\$!i 0-02()!F2+.\$C2!>?G\$'0\$C*\$! /\$1,02\$!2\%!=(C(-\$!K\%+'!(*(.\$=0*,!(C.!/\$))U1\$0C-3!#WG,3[[///T+/\%T*([,\$[.0-02()[T!

 $n ('C0C-U, _0), !*\%+C, $))\%', !(2!2#$!F2+. $C2!i $&$)\%G = $C2!Q$C2'$!6#WG3[[///T, .*T+/\%T*(8!('$!'$(.K!2\%! #$)G!K\%+!0=G'%&$!K\%+'!)$('C0C-!, _0), T!''#$K!\%h$'!G'$, $C2(H%C, !%C!, 2'(2$-0$, !0%'!0=G'%&0C-!H=$!$ $= (C(-$=$C2!!=+)HG)$U*#%U*$!$?(=!G'$G('(H%C[/'0HC-I!2$?21%%_!'$(.0C-I!(C.!=\%'$T!cC.0&0.+()!, +GG%'2!0, !%h$'$. !2#'%+-#%+2!2#$!B())[] 0C2$'!2$'=, !0C!2#$!. '%GU0C!n$('C0C-!\$)G!Q$C2'$!!(C.!K$('U'%+C.!2#'%+-#!0C.0&0.+()!*%+C, $))0C-T!$

F2+. \$C2,!/#%!('\$!0C!\$=%H%C()[=\$C2()!.0,2'\$,,!,#%+).!'\$0\$'!2%!<\$C2()!\\$()2#\] \$,2\$'C!6#WG3[[///T#\$()2#T+/%T*([=\$C2()\#\$()2#8!0%'!(!*%=G)\$2\$!)0,2!%0!%GH%C,!(1%+2!#%/!2%!%12(0C!#\$)GT!

R. . 0H%C()!,2+. \$C2U'+C!,+GG%'2!,\$'&0*\$,!('\$!%h\$'\$. !1K!2#\$!YFQI!#WG3[[/\$,2\$'C+,*I*([,\$'&0*\$,T!