

! "#\$%&&' %(\$)*+,)-\$0123/014\$

#\$%"& ! ()& ! *"+, +-%. /, "0%+1"2+3"+-%. +4-/45"678"91: -7, 8/; %": 4%"<: 1"8\$%"=+, 7>80"?@%, 78/; %"A: . . /88%"
B=?ACD"E%>+8/: 43"2/8\$": 8\$%1", : . . /88%3"+4-"8\$%"+- . /4/381+8/: 4"2%1%"%@, %>%480" F \$+8<: >: 23"/3"+"1%9: 18"
: <: 71", : . . /88%"2: 1G%"6%5/44/45"2/8\$"+"1 7/, G%"47. %1+8/: 4": <1: 78/4%. +88%13"8\$+8"=?A": ; %13%3H"
<: >: 2%-"60"0%+1)39%, /<, ". +88%13"+4-H</4+>0H"+"37. . +10": <8\$%"38+8%": <+<<+/13"/4"8\$%"91: , %33": <"<+, 7>80"
5: ; %14+4, "%1<: 1. D"

5, ' -6&*\$7 ,)89\$

! D\$=?A"\$%>- <: 71"1: 74-3": <%>% , 8/: 43H"+8\$%/1"1%57>+1"8/. %3H"+4-"8\$1%"39%, /+>F #J"8\$/3"0%+1D"=?A"2/3\$%3"
8: "8\$+4G"J7%"K>/1"/4"8\$%"L%+4MB": <<, %"+4- "N%<<A>+1G"/4"0#<: 1"8\$%/1"/4-/39%43+6%">+33/38+4, %D""\$

E: 74- "0H"PO(')! ' 0*"BR+7>J+88%1C"

E: 74- "0H"! &Q&)! &QS"BJ/> /+"A+1>C"

E: 74- "00H"&Q&*)&Q&"B#/45"T/C"

E: 74- "0UH"*Q! *)*Q! V"BW%\$. %8"X-%G: 4C"

J9%, /+>F #JY#"%"</138": 4%"2+3">74, \$%-": 4"J%98%. 6%1"P"8: "<>+"; +, +4, 0": 4"A?RRD"#\$%"3%, : 4-": 4%"2+3"
38+18%-": 4"X, 8: 6%1"Z"8: "9: 97>+8%"+E%; /%2"A: . . /88%"<: 1"8\$%"L%+4": <J87-%483QU/, %"R1%3/-%48": <
J87-%48"[<<+/13"B1%I 7%38%-"60"8\$%"R1%3/-%48C"#\$%"8\$/1-": 4%"2+3">74, \$%-": 4"\\"; %. 6%1"]"

!"

$\nabla \theta^u$

$\&^u$

[4": 9%4": 17. "<: >: 2% -"

X71"=+, 7>80" _+4-6: : G", +>>3<: 1"61: +- "9+18/, /9+8/: 4"+4-"2: 1G: +- "3\$+1/45"/4"5: ; %14+4, %D"08"+>3: "+3G3"8\$+8" 8\$: 3%"` 7+>/%-8: "3%1; %": 4", : . . /88%3"- : "3: "+8"+991: 91/+8%8/. %3"8\$1: 75\$: 78"8\$/1", +1%1a"B=+, 7>80" _+4-6: : GH"9D" & ! CD"X71, 711%48"3038%. "-: %3"4: 8"-%>; %1": 4"8\$+80"=: 1"/438+4, %H"/4". : 1%"8\$+4"]' "9%1, %48" : <, +3%3"8\$/3"0%+1"2%"\$+-: 4>0": 4%" ; : >748%1"9%1": 9%4"39: 8H"\$%4, %": 71" `%, 8/: 43a"+1%"4: "817%"%, 8/: 43D" F: 13%H": 4"+47. 6%1": <: , , +3/: 43"2%"2%1%"74+6%"8: "<>": 9%4"39: 83H<: 1,/45"73"8: "%@8%4"- -%+->4%3": 1" , +110"; +, +48"39: 83<: 12+1-"8: "8\$%"4%@8"1: 74-D"#\$/3"2+3"4: 8"+4"74809/, +>"0%+1D""

#\$%"91: 9: 3%-"3038%. "+3371%3"61: +- "9+18/, /9+8/: 4"+4-"5: ; %14+4, %"3%1; /, %"3\$+1/45H"/4, >7-/45" <+/1" 2: 1G: +- "3\$+1/45"+, 1: 33"-<, 7>80"5%4%1+8/: 43H"2\$/%"%+; /45"+. +@/. 7. : <"<1%--: . "<: 1" <, 7>80"8: ", \$: : 3%" <1: . "5: ; %14+4, %"3%1; /, %": 98/: 43"6+3%-: 4"38/97>8%-. /4/. 7. "%@9%, 8+8/: 43" <, 1"5: ; %14+4, %"3%1; /, %H" /4, >7-/45"8\$%"8/. /45": <8\$%/1"3%1; /, %D"04"- -/8/: 4H"8\$%"91: 9: 3%-"3038%. "+3371%3": 48/47/80": <, : . . /88%" . . 6%13\$/9D"#\$%"9: /48"/3"8\$+8"8\$%"91/; />%5%": <+, 7>80"3%>)5: ; %14+4, %", : . %3"+>: 45"2/8\$"+1%39: 43/6/>80" 8\$%"1%39: 43/6/>80"8: "6%"9+18": <"8"+4-. +G%"8"2: 1G"#\$%"0, 0, >%0, : 74, />91: 9: 3+>"3%"-%3/54%-8: "8+, G%">: 45) 38+4-/45" <, 7>80", : 4, %143"+6: 78%"1 7/80"+4- "%<%>, 8/; %4%33": <: 71" <, 7>80"3%>)5: ; %14+4, %"3038%. D" =?A"6%">%; %3"8\$+8"2%"2/>"6%"1%+-0"8: "; : 8%": 4"8\$%", 0, >%0, : 74, />91: 9: 3+>"4"8\$%", : . /45" <+>"3%. %38%1D"0</"8" /3"+991: ; %H"2%"2: 7->"\$+; %8\$%"</138", : . . /88%"%%, 8/: 4"6+3%-: 4"8\$%"4%2"5: ; %14+4, %". : -%">/4"8\$%"<+>" : <&' !]H"+4-8\$%"4%2"3038%. "2: 7->"8\$%"4"6%, : . %<7>0": 9%1+8/; %"4"8\$%"+, +-%. /, "0%+1"& ! S) ! ZD""

F \$/%"2%", +4". +G%"8\$%", 0, >%0, : 74, />2: 1G": 4"8\$%"6+3/3": <: 71", 711%48", : . . /88%"3817, 871%H"/-%+>0H"2%" 6%/-%; %8\$+8"2%"3\$: 7->+>: "1%3817, 871%"+4- "381%+. >4%": 71", : . . /88%"3038%. D"A: . . /88%"1%3817, 871/45" 2/8\$"+; /%2": <%4\$+4, /45"/83%"<<, /%4, 0"2/>"6%"8\$%"<, 73": <"4%@8"0%+1MB"1%<: 1. "2: 1G"0</8"87143": 78"8\$+8" . : 1%"8/. %"3"1% 7/1%-"8: ", : . 9%8%"8\$%"8+3GH"8\$%"4%2"3038%. ", : 7->"6%">74, \$%-"+"0%+1">8%1D"04"+40", +3%H" 8\$/"3"2: 1G"2/>"6%"74-%18+G%"4"4", >: 3%", : >>+6: 1+8/: 4"2/8\$%"8\$%", : . . /88%3H"+4-H"+3"+>2+03H"=?A", : 48/47%3" 8: "2%>, : . %<+, 7>80" <%>-6+, G"+3"8\$%"5: ; %14+4, %"1%<: 1. "91: , %33". : ; %3"+>: 45"C"+/. /45"+8"1%<: 1. /45"8\$%" 2+03"/4"2\$/ , \$"2%H"8\$%"<, 7>80H"5: ; %14": 713%>; %3D""

=?A"8\$+4G3%: %10: 4%"4/: >: %-"4"8\$/3"91: , %33<: 1"8\$%/1"5%4%1: 73"+4-", : 43817, 8/; %"<%>-6+, GD""

#2: ". %. 6%13": <=?A"C"