
SCT" ". - 3 N!A/! "D(#\$(/1!.\$,B;\$B,-!\$),B!M)(;)!JH2!\*(#\$+,(-#!2%/!J-!"3&-00-0!(/!\$)-!2B,,(;B'B39!

0-"<E."MC9<0"[CP, &A"ECY."<C, FE<"P5, 89.9"5-"<E."B5@.F.]9"E:9<58A"?5<E"C9":-<.8>.;:C<."E:9<58A" P5, 89.9"S.\F\"\$@:5<"UE58.]9" I:9<58A"5["G8A-" # CH8T"C-; "C9"\$U.>9"S.\F\" '@:P:C" J C@K.8]9"P5, 89."5-" P5@.F."C8PE:<.P<, 8.T\"" '-"\$U.>"<EC<", 9.9"<E."B5@.F.]9"E:9<58A"C9"C"P.-<8C@"g<. `<h"5[[.89"C-" 5MM58<, -:<A"[58"[CP, &A"[85>"YC8::;";:9P:M@:-C8A"?CPKF85, -;9"S.\F\" I:9<58A0" '8<" I:9<58A0" U5P:5@5FA0"\$-F@:9ET"<5".-FCF."9<, ;.-<9":-"G8A-" # CH8]9"MC9<\"

S?T"6, %D(#N!A/!"D(#\$(/1!K+, G%&'-!.\$, B;\$B, -!\$+!.B>>+,\$!O-#-%,;)

 $\% Y. 8" \langle E."MC9 \langle "9.Y. 8C0"A. C890" \langle E."B500.F."EC9"P8.C \langle .:;"C"-.H"[58>"5["78C`:9"000~D:.0]; H58K" \\ U.>:-C890":-"HE:PE"C"9:-F0."[CP,0 \langle A"C;Y:958>.-<589"9.Y. 8C0"78C`:9"000"M85^.P<9"5-"8.0C \langle .:;":99,.9" \\ C-;">... \langle 9"H:\langle E"9 \langle .;;.-\langle 9"5-P."C"H...K" \langle 5";:9P,99"8.0C \langle .:;"8.C;:-F9"58"9 \langle .;;.-\langle "M85^..P<9 \rangle "4E:9" \\ 9 \langle 8,P \langle ,8."H5,0];"C005H"9.Y. 8C0"M85^.P<9" \langle 5"F5"[58HC8;":-"C-A"F:Y.-"9.>.9 \langle .8"C-;"P8.C \langle .."C"P5E58 \langle "5["[0.05H"8.9.C8PE.890"HE:0.">C-CF:-F";.>C-;"5-"[CP,0 \langle A" \langle :>... \rangle '-".`.>M0C8":-" \langle E:9"8.FC8;6" \\ U \langle .ME.-"W:;.8] 9 I:9 \langle 58A"1ej"S45M:P9":-" #5;.8-"*UI:9 \langle 58AT0"HE:PE"[5P,9.;",M5-" \langle E."B500.F.]9" \\ E:9 \langle 58A \rangle "$ 

1"0--5"YC<:5-6.B>>+, \$!7+, !K+, G=.\$B05!6, +P-; \$#!

c"0--5YC<:5-6"OB/O-O!. \$BO-/\$!O-"+M#)(>#!

"#\$(3 %\$-0!:+#\$#N!

- \_ 4E. E:8."5["C"-.H"9<C[["P5-Y.-58"5["E:9<58A"M85^.P<9 H5,@;"8.V,:8."C-".-;5H>.-<"5["C<@.C9<" 1!>:@:5-"
- \_ U, MM58< [58"H58KQ9<,; A"M85^.P<9 i "1"9<,; .-<9"
- $\_SU, >> .8T$ "D.@65H9E:M96 1a0222"M.8"C--,>"
- "78C":9"[CP, @A"9, MM58<61a0222"M.8"C--, >"

L:Y.-"<E."9PC@."5["<E.9."P59<90"H."8.P5>>.-; "<EC<"<E."B5@@.F.",-;.8<CK."[,-;8C:9:-F".C8>C8K.;" <5"9.MM58<<E."P,88:P,@C8.8.P5>>.-; C<:5-9\"

5#!5& - 76(!8+&'()\*+ - &10\*'(!

!\".;,--/#!

J."8.P5>>.-; "<EC<"<E."B5@.F."P8.C<.d9, MM58<"<H5">, @<:>.; :C"9P8..-9 <5"?.:-9<C@.; "HE.8."<E."?, @.<:-"?5C8; 9"C8."M8.9.-<@A":-"<E."C@P5Y.09MCP.", -; .8"<E.">>C:-"9<C:89"5["%@; "X:?8C8A\"

4E."9P8..-9"H:00"9.8Y."<E."9C>."M,8M59."C9"<E."C8.C9 <E85,FE5,<"PC>M,9 > C8K.;"[58" :> CF.d;5P,>.-<";:9M0CA9 \_ C"[8.V,.-<0A",M;C<.;"9.<"5[":> CF.90";5P,>.-<90"C-;"<.`<"M85Y:;:-F" :- [58>C<:5-"C?5,<"<E."B500.F.]9"E:9<58A\"

I 5H.Y.80"<br/>
'E.A"H:00"?.>,PE">58." i <E.A"5PP, MA C"P.-<8C0"850.:-"<E."M85P.99"5["<8C-9[58>:-F" <E."C0P5Y.09MCP."[85>"C"H.000<br/>
'8C[[:PK.;"MC99CF.HCA":-<5"C"M0CP."HE.8.">.>?.89"5["<E." P5>>,-:<A"PC-".`M.P<"<5"9<5M"C-;"8.F,0C80A"8.P.:Y."C-;"9EC8.:;.C9"C-;":-[58>C<:5-\"

(C>:-F"<E:9"MC8<"5["<E."?,:0;:-F"H:00"?.":>M58<C-<":-".9<C?0:9E:-F":<"C9"C"M0CP. HE.8.">.>?.89"5["<E."P5>>,-:<A"H:00"?.".-P5,8CF.;"<5"<E:-K0"8.[0.P<0":-<.8CP<0"C-;".-FCF."H:<E".CPE"5<E.8\""

J E:0. <E."9MCP. EC9"?...-"PC00.;"\$)-!%';+<- E.8.0"<E."B500.F.">:FE< P5-9:;.8"-C>:-F"<E."9MCP." C[<.8"C"9<C[[ >.>?.8"58 C;>:-:9<8C<58"5["P50580 C-;",9:-F"<E."-C>."P5-9:9<..-<0A"C9 M.5M0.]9" C<<..-<:5-":9";:8.P<..;"<5"P5-<..-<0";:9M0CA90"C-;".Y.-<9"<EC<"CMM.C8"C-;"<CK. M0CP."<E.8.\"

D5005H:-F'<E.9."9C>."0:-.90'<E."L85,M"C095"8.P5>>.-;9"<EC<"<E."U<C-;:-FB5>>:<..:-Y.9<:FC<." 5<E.8"9MCP.9 C-;"855>9"<E85,FE5,<"<E."B500.F."<EC<">>:FE</"?.-C>.;"C-;">>C8K.;":-"58;.8 <5"</td>

.0.YC
.C-;"C>M0:[A"<E...>M.8:.-P.9"5["n9
.E[HE5"ECY."P5-<8:?,<.;"<5"<E."0:[."5["<E."B500.F.\"</td>

4E. 0:9<"5["8.9.C8PE"<5M:P9":-P0,;.;"C9"C-" 'MM.-;:`"P5,0; M85Y:;. C"P5-<:-,:-F"95,8P."5[ P5-<.-<" [58"<E."9P8..-9\"

4C8F.<"; C<.6.>, (/1!RSRS!

"#\$(3%\$-0!(/(\$(%'!;+#\$#N!I/(\$(%'!O-#(1/F&B('O!== TUVCSSS\)!\%//B\%' 3\%(/\\$-/\%/;-!\#\\$\%77(/1!:JL\9!

1"2+/7-,-/;-N!H2:FK+3-/X#!\*(1)-,!"ON!6%#\$%!6,-#-/\$%!%/0!OB\$B,-!

' "P5-[.8.-P."?8:-F:-F"<5F.<E.8"C-":-<.8-C<:5-C@"F85,M"5["9PE5@C89"<5"M8.9.-<d9EC8. 9PE5@C89E:M"5-" J 5>.-\9" I :FE.8"\$;,PC<:5-\"

4E."[5@5H:-F"<5M:P9"P5,@;"P.-<.8"<E..Y.-<6"

- J 5>.-]9 .; ,PC<:5-C@ 8.[58>"C[<.8"<E."B:Y:@" J C8"
- \_ J 5>.-]9 .`M.8:.-P.9"C<" I :9<58:PC@A"G@CPK"B5@.F.9 C-; "\*-:Y.89:<:.9"SUM.@>C-0"G.--.<0" 4:@5<95-0"C-; "GC8?.8QUP5<:C"B5@.F.9T0"C-; "G@CPK"C; Y5PC<.9"[58"H5>.-]9".; ,PC<:5-"9,PE"C9" #C8A" #PB@.5; "G.<E,-.0" (C--:." I .@.-"G,885,FE90" ' --C"+,@:C"B55M.80"C-; "X,PA"):FF9"U@5H.\"
- 4E. 750:P:.9"C-;"750:<:P9"5["\$`P0,9:5-"
- 48C-9 U<, : -<9"C<" J 5>.-]9"B500.F.9"
- \_ I .C@<Ed J .@-.99"
- "BEC-F:-F" ' <<:<, ; . 9 45HC8; 9"U<, ; . -<9"H:<E" ) :9C?:0:<.9"

' "B5-[.8.-P."B5>>:«.."H:00"M85Y:;."C"[,00.8";.9P8:M<:5-"5["<E."B5-[.8.-P.N;8CH",M"<E.".Y.-<]9" ?,;F.<\N;.Y:9."C"PC00"[58"MCM.89N"PE559."C"K.A-5<."9M.CK.8 C-;"P8.C<."C"0:9<"5["9PE50C89"HE5" 9E5,0;"?.":-Y:<.;"<5"C<<.-;"C-;"M8.9.-<"<E.:8"H58KN C-;"C88C-F."[58"M,?0:PC<:5-"5["C"P5-[.8.-P." Y50,>.0"M8.[.8C?0A"5-0:-."C-;"5M.-0CPP.990"C9"MC8<"5["<E."B500.F.]9"E:9<58:.9"H.?"M8.9.-P.\"

' "H58K:-F".9<:>C<."[58"C">, @<:0; CA"P5-[.8.-P.":9"<EC<":<"H:@@"P59<"1 j 20222\"

4C8F.<"; C<.6.>, (/1!RSRY!

## c = 3 + (%')!

BE8:9<5ME.8" ' 0. ` C-; .8\9"?55K9"5-"C8PE:<.P<, 8.0"?,:0;:-F0"C-;"<5H-9 M85Y:; .":-9:FE<9 <E85, FE" HE:PE"H.">:FE<"P5-P.:Y."5[ <E."%0; "X:?8C8A"C9"C"kH5, -;.;"?,:0;:-F0\"C-;", -;.89P58."5, 8" P5>>:<>.-<<5"\kE.C0\"C-;"<8C-9[58>"<E."9MCP.\"

4E.">.>58:C@H:@@"?A -.P.99:<A?."C">C8K.8"5["C?9.-P.90"8.M8.9.-<:-F"<E59.".`P@,;.;"[85>">.>?.89E:M":-"<E."B5@.F."P5>>,-:<A\"

 $\label{eq:continuous} $$\ \ -\ M^{C896} 4E. \ J 5>.-] 9"4C?@. C<"bC@.0"; .9:F-.; "?A" \# CAC"X:-N"*-:Y.89:<A"5[" (58<E"L.58F:C"EC9"C">.>58:C@"FC8; .-0"H:<E"8.>.>?8C-P."9MCP.9"; .Y5<.; "<5"[CP, @<A0"C; >:-:9<8C<5890"9<, ; .-<90"C-; "9<C[[\"]$ 

q,.9<:5-9"<5"?."C;;8.99.;6" JEC<?,;F.<"H:00"?."CYC:0C?0.r"

- $\_~I~5H~;5"H.";.Y.@5M"C";.9:F-"M85P.99r"$
- \_ I 5H C-; "HE.-"; 5"H..-FCF." <E. "P5>>, -: <A":-" <E: 9"M85P.99r"

## *"77. ' /09!*

## $0 \setminus O'' = O'' =$

B.-9,9"5["0>CF.90"7C:-<:-F90"UP, @M<, 8."
I:9<58A"5["U<,;.-<" 'P<:Y:9>"\_"c29dm29d329d78.9.-<"
I:9<58A"5["7.88A" I 5,9."
4E."\$-:;"B55K"B.-<.8"
\$`C>:-C<:5-"5["G#B"b.C8?55K9"
\$`C>:-C<:5-"5["<E."G#B"P5@.P<:5-"5["):F:<:R.;"0>CF.9"
\$`C>:-C<:5-"5["<E."G#B"A'B3/%-!O-;+,O!
U.8Y:-F"7.5M@.d J 58K:-F"7.5M@."
4E."f0-<.8:58"L.5F8CME:.9]"5["<E."BC>M,9]"G,:@;:-F9"

## 00\"<u>?B\$, -%;)!"<-/\$#!</u>

*Y9!H(/(!6+>=Z>#!* 

4E. "B5>>: <... "P5, 0; ".-FCF. <E. "P5>>, -: <A" < E85, FE" 9 < CF: -F" C"YC8: . <A" 5[".Y. - <9" C-; "H58K9E5M9" < EC<">:FE< < CK. "<E. "[58>"5[6"8. [0.P<:5-"M85>M<9"[58"P5>>, -: <A">>. >?.89"<5" C-9H.8"H: <E">>C8K.89" < EC<">:FE</EX