

EDST5443

5ggYgga YbhZcf@YUfb]b[.: fca 'H\Ycfmhc 'DfUW]WY

GYa YghYf'Hk c''##'&\$%

7ci fgY`Cj Yfj JYk

`GHUZZ7cbhUW`i8YHUJ`g`

@YWi fYfg`

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWUhcjb	D\cbY
8Ybb]g`5`cbnc	X"U`cbnc4 i bgk "YXi "Ui	Hi YgXUmUbX H\i fgXUm - .\$\$!%\$\$da	F a `%, `>c\b ; ccXgY`` 6i]X]b[- ' ,) `-) \$*

GWXcc``7cbhUW`i`bZcfa Uhjcb

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5fng`UbX`GcWU`G`WYbWg

@Yj Y`%&>c\b`; ccXgY``6i]X]b[`fi &\$t

H. Z`*%f&t`- ' ,) `% ++

9. YXi WUhcjb4 i bgk "YXi "Ui

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5hYbXUbW`F Yei]fYa Ybng

5XX]hcjbU`GWXcc``cZ9Xi WUhcjb`UhYbXUbW`fYei]fYa Ybng

h]g`YI dYWYX`hUhUbmigh XYbhYbfc`YX`]b`Ub`98GH`Wci fgY`k]h`hY`GWXcc``cZ9Xi WUhcjb`k]`a U_Y`U
 Wca a]ha Ybhic`hY]f`YUfb]b[`UbX`UhYbX`U`WUggYg`]b`Z `k \YfY`WcbhYbh]g`XY`]j YfYX`]b`U`ZUW`!tc!ZUW
 a cXY`YI W`dh]b`W`fU]b`W`fW`a ghUbW`g`k \YfY`UVgYbW`]g`Xi Y`tc`]`bYggZ`a]gUXj Ybh fy`cf`i bZcfYgYYb
 W`fW`a ghUbW`g`VYncbX`hY`gh XYbng`W`bfc`""`5`a]b]a i a`UhYbXUbW`fYei]fYa YbhicZ, \$i`]g`fYei]fYX`Zcf
 YUW`Wci fgY`""`b`W`fU]b`W`fW`a ghUbW`g`Z`U`gh XYbhia Uma]gg`i d`tc`&\$i` `cZU`Wci fgY`k]h`ci hZcfa U`
 Udd`]WUhcjb`UbX`i d`tc`""`i` `cZU`Wci fgY`k]h`Zcfa U`XcW`a YbUhcjb`fYbng`]U`Ya U]`tc`Wci fgY`W`bj YbcfL
 dfcj]X]b[`U`hY`fYei]fYa Ybng`XYHU]YX`VY`ck`UfY`a YH`Gh XYbng`bcha Yf]b[`hY`UhYbXUbW`
 fYei]fYa Ybng`ci h]bYX`UVcj Y`k]`VY`Uk UfYX`Ub`I`bgUhgZUW`c`fm: U]`fl` : L`Zcf`hUhWci fgY`fY[UfX`Ygg`cZ
 hY]f`dYfZcfa UbW`]b`hY`UggYgga YbhUg`g`cf`chYf`fYei]fYa Ybng`Zcf`hY`Wci fgY`"

: cf`Z`f`hYf`]bZcfa Uhjcb`cb`9Xi WUhcjb`Wci fgY`UhYbXUbW`fYei]fYa Ybng`Z`d`YUgY`fYZf`tc`hY`fYgdYW]j`Y`
98GH`A`ccX`Y`a`cXi`YfgL`"

5WUXYa]W`bZcfa Uhjcb`

: cf`YggYbh]U`gh XYbh]bZcfa Uhjcb`fY`Uh]b[`tc`fYei Ygng`Zcf`YI`hYbg]cb/fYj`]Yk`cZa`Uf_g/cVW`dUhjcbU`\\YU`h
 UbX`gUZf`m`YI`Ua`]bUhjcb`dfcW`Xi`fYg/gdYW]U`W`bg]XYfUhcjb`]b`hY`Yj`YbhicZ]`bYgg`cf`a`]gUXj`Ybh`fY/
 gh`XYbhYei`]mUbX`X]gUV]`]m`UbX`chYf`YggYbh]U`UWUXYa`]W]bZcfa`Uhjcbz`
 gYY`[\hfdg.##k k "Ufng"i bgk "YXi "Ui #W ffYbhghi XYbng#UWUXYa \]W\]bZcfa Uhjcb#dfcfcW`gl\[i \]XY`\]bYg#](#)

7 ci fgY'8YHJ]`g

7 fYX]h'Dc]bHg '*`

K cf_`cUX

%) \$` \ci fg]bWf X]b[`WUgg`WcbHUWf\ci fgžfYUX]b[gž`WUgg`dfYdUfUf]cbžUggYgga YbhžZc``ck`i d`UWfj]]fYgž YhW

Gi a a UfmicZ'h\Y'7 ci fgY

⊖`h]g`Wci fgYžmci `k]`YI d`cfY`h\Y`i bXYf`m]b[`d\]cgcd\mUbX`fUf]cbU`Y`Zcf`UggYgga YbhZcf`YUfb]b[žUbX

'5`hYgY`UWj`jYg`k`]'`cWW`f`]'b`Ub`'cb`]'bY`Ybj`]fcba`Ybh`h`Uh]g`gi`ddc`fhj`Y`UbX`]'bW`gjj`Y`cZU`''YUfbYfg"

5i ghfU`]Ub`DfcZYgg]cbU` ; fUXi UhY`HYUW]b[`GHUbXUfXg

GHUbXUfX	8YgW]dhcb
%"&"	9I dUbX`i bXYfghUbX]b[`cZ\ck`ghi XYbthg`YUfb`i g]b[`fYgYUfW`UbX`k cf_d`UW` _bck`YX[`Y`"
%) "&	8Yj Y`cd`hYUW]b[`UW]j]hYg`h Uh]bWcfdcfUHY`X]ZYfYbh]UHYX`ghfUHY[]Yg`hc`a`YYh`hY` gdYW]Z]W`YUfb]b[`bY`YXg`cZgh`XYbthg`UW`cgg`hY`Z` ``fUb[Y`cZUV`]hYg`"
&" "&	8Yg][b`UbX`ja d`Ya Ybh`YUfb]b[`UbX`hYUW]b[`dfc[fUa`g`i`g]b[` _bck`YX[Y`cZ`W`ff]W`i`a`z` UggYgga YbhUbX`fYdcf]b[`fYei`]fYa Ybthg`"
' "%"	8Yj Y`cd`U`W`h`i`fY`cZ`[` \ `YI`dY`W`U`h`c`b`g`Z`c`f`U` ``ghi XYbthg`Vmia`cXY``]b[`UbX`gY`h]b[W`U`Y`b[]b[`YUfb]b[[`cU`g`"
' "&&	D`Ub`UbX`ja d`Ya Ybhk`Y`!`ghf`i`W`h`fYX`YUfb]b[`UbX`hYUW]b[`dfc[fUa`g`c`f`Y`gg`c`b` gYei`YbW`g`h`Uh`Y`b[U[Y`ghi XYbthg`UbX`dfca`c`h`YUfb]b["`
' "+"&	D`Ub`Z`c`f`U`dd`f`c`d`f]U`H`UbX`W`c`b`h`I`h`i`U`m`i`f`Y`Y`j`U`b`h`c`d`d`c`f`h`b]hYg`Z`c`f`d`U`f`Y`b`h`g`#`W`U`f`Y`f`g`h`c`V`Y`]b`j`c`j`Y`X`]b`h`Y`f`W`j`X`f`Y`b`h`g`YUfb]b["`
) "%"	8Yj Y`cd`UbX`Udd`m`U`W`c`a`d`f`Y`Y`b`g]j`Y`f`Ub[Y`cZ`U`g`g`Y`g`g`a`Y`b`h`g`f`U`H`[]Yg`hc`X`U[`bc`g`Y` YUfb]b[`bY`Y`X`g`z`W`c`a`d`m`k`]h`W`ff]W`i`a`f`Yei`]fYa Ybthg`UbX`gi`dd`c`f`h`W`c`Y`U[i`Yg`hc` Y`j`U`i`U`h`h`Y`Y`Z`Y`W`h`j`Y`b`Y`g`g`c`Z`h`Y`f`U`dd`f`c`U`W`Y`g`h`c`U`g`g`Y`g`g`a`Y`b`h`"
) "&"	G`Y`Y`W`h`Z`f`c`a` `Ub`Y`Z`Y`W`h`j`Y`f`Ub[Y`cZ`g`h`f`U`H`[]Yg`hc`d`f`c`j`]X`Y`h`U`f[Y`h`X`Z`Y`X`V`U`W`V`U`g`Y`X`c`b`]b`Z`c`f`a`Y`X`UbX`h`j`a`Y`m`i`↑`X[Ya Ybthg`cZ`Y`U`W` `gh`XY`b`h`g`W`ff`Y`b`h`b`Y`Y`X`g`]b`c`f`X`Y`f`h`c`d`f`c[fY`g`g` YUfb]b[
) "" "&	I`b`X`Y`f`g`h`U`b`X`UbX`d`U`f`h`W`d`U`H` `]b`U`g`g`Y`g`g`a`Y`b`h`a`c`X`Y`f`U`h`c`b`U`W`]j`]hYg`h`c`g`i`dd`c`f`h`W`c`b`g]h`Y`b`h` UbX`W`c`a`d`U`f`U`V`Y`↑`X[Ya Ybthg`cZ`gh`XY`bh`YUfb]b["`
) "("&	I`g`Y`g`h`i`XY`bh`U`g`g`Y`g`g`a`Y`bh`X`U`H`h`c`Ub`U`m`g`Y`UbX`Y`j`U`i`U`H`g`h`i`XY`b`h`i`b`X`Y`f`g`h`U`b`X]b[`c`Z` g`i`V`Y`W`h`c`b`h`Y`b`h`z`]X`Y`b`h`Z`h`b[`]b`h`f`j`Y`b`h`c`b`g`UbX`a`c`X]Z`h`b[`h`Y`U`W`]b[`d`f`U`W`h`W`"
) ")"&	F`Y`d`c`f`h`W`Y`U`f`m`z`U`W`W`f`U`H`m`UbX`f`Y`g`d`Y`W`Z` ``m`h`c`g`h`i`XY`b`h`g`UbX`d`U`f`Y`b`h`g`#`W`U`f`Y`f`g`U`V`c`i`h` g`h`i`XY`b`h`U`W`Y`j`Ya`Y`b`h`z`a`U_]b[`i`g`Y`c`Z`U`W`W`f`U`H`UbX`f`Y`]U`V`Y`f`Y`W`c`f`X`g`"
* "%"&	I`g`Y`h`Y`5i`ghfU`]Ub`DfcZYgg]cbU`GHUbXUfXg`Zc`f`HYUW`Yfg`UbX`UXj`W`Z`f`c`a`W`c`Y`U[i`Yg`hc`]X`Y`b`h`Z`m`UbX`d`Ub`dfcZYgg]cbU`YUfb]b[`bY`Y`X`g`"

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7 f]hWU`fYZY%&cb`	(\$i	(\$i %& %& %& %&		

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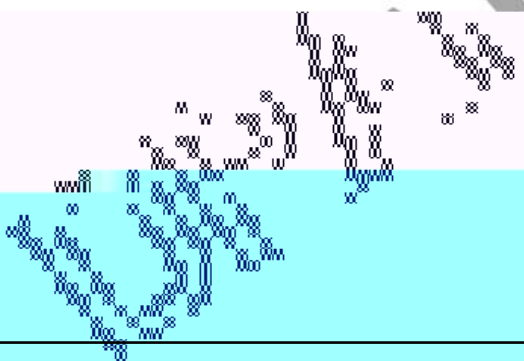
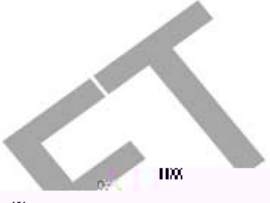
GdYW]Z]W7 f]h]f]U	''flŁ—————2fŁŁ			
I bXYfghUbX'cZħY'ei Ygh]cb'cf']ggi Y'UbX'h'Y' _Ym'Wc'bW'dhg]bj'c'j YX				
8Ydħ'cZUbUm]g'UbX#f'W]h'ei Y']b'fYgdcbgY'hc'h'Y'hUg_				
: Ua]]Uf]m]k]ħ'UbX'fY'Yj bW'cZdfcZYgg]cbU'UbX#f'fYgYUfVX]h]fUhi fY'i gYX'hc'gi ddcfhfYgdcbgY				
Gfhi Wħi fY'UbX'cf[Ub]nUh]cb'cZfYgdcbg				
DfYgYbhU]h]cb'cZfYgdcbgY U'W'c'f]b['hc'Uddfcdf]Uħ'UWUXYa]WUbX]b[i]gh]W'c'bj Ybh]cbg				
; YbYfU' Wc'a a Ybh]fYWc'a a YbXUH]cbg'Zcf'bYI h]h]a Y.'				

@YWħi fYf

F YWc'a a YbXYX.' ' ' #&\$'fl @DG'7F '8B' < 8Ł'

k Y][\h]b[' . &\$i

'B 6. ħ.]g'h]W_g]b'h'Y'j Uf]ci g'Vcl Yg'UbX'XYg][bYX'hc'dfcj]XY'ZYXVUW_ħc'gh'XYbh]g/h'Ym]UfY'bch[]j Yb
 Yei U'k Y][\h]b'XYħ'fa]b]b['ħY'fYWc'a a YbXYX' [fUXY" 8YdYbX]b['cb'ħY'bUhi fY'cZħY'UggYgga Ybh]Ug_ž
 'YWħi fYfg'a Um]U'gc'Wc'bYI h' U']nY'UbX#f'Ua YbX'ħ'YgY'gdYW]Z]WV]h]f]U" 'H\Y'fYWc'a a YbXYX' [fUXY']g
 h]b]h]h]j Y'cb'mžgi Va 'YWħi'hc'g]h]bXUfX]gUh]cb'dfcV]ggYg'UbX'Uddfcj U'Vmiħ'Y'GW]cc'cZ9Xi WU]h]cb
 @YUfb]b['UbX'HYUW]b['7ca a]ħY"'



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Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbng`UfY`YI dYW`X`hc`di h`h`Y]f`bUa Yg`UbX`gh XYbhbi a VYfg`cb`Yj YfmdU[Y`cZ`h`Y]f`Ugg][ba Ybhg"

Hi fb]h]b`Gi Va]gg]cb

- K cf_`gi Va]hYX`%\$`hc`%-`XUmg`UZhYf`h\Y`gh]di``UhYX`XYUX`]bY

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5ggYgga YbhF YZcfa `; fci d"&\$&"5ggYgga YbhZcf`YUfb]b[.`%\$`df]bW]d`Yg

6`UW`Z`D`"/`K`]]Ua`ž`8`"f&\$`\$`%`&`[bg\]XY`h`Y`V`UW`V`c`I` .`F`U`g`b`\[` `g`h`U`b`X`U`f`X`g`h`f`c`i` \[` \`W`U`g`g`f`c`c`a` `U`g`g`Y`g`g`a` `Y`b`h`](#)

Ga]hž>"? "f&\$\$' Ł'F YWcbg]XYfb['fY']UV']m]b'WUggfccca 'UggYgga YbhUbX'[fUX]b["'7VgUSf[a` S^
? WSegdW_ W f, ;eegWē S` V BcSUF[UW \$\$f(Łž&*!' ' "'F Yf]Yj YX
Zca [\hđ.##c\]bY\]VfUfm'k \]Ym'Vca #Xc\]#%\\$"%%%#"%+\(.\)!' - - &"&\\$\\$' "hV\\$\\$%\(%! #dXZ](#)

Gd]`Yfž8 "f&\$\$- Ł'3eeWē_ W f, 8VWWTsu] fa bca_ afWefgVW f Wsd [YžHYUW]b['8Yj Y`cda YbhC Z]W`p
K Y`Ub[U'K \U_UdU_Uf]5_c"H\Y'I b]j Yfg]mCZ
K U]_Uhc" [\hđ.##k k k "k U\] Uhc"UWbn#Xi #dXZ#cc `Yg# S5ggYgga Ybh YYXVUW "dXZ](#)

H]a dYfYmž< "f&\$\$%Ł'Ge[Y efgVW f SeeWē_ W f XadbcaWē[a` S^Wsd [Y, 8aUge[Y a` efgVW fei
agfUa_ Wē fa [VW f]X fVSUZWēi` WWefld" %Ł' Ł'89978ž
J]Wc]U" [\hđ.##k k k "YXi W\]hcb"j \]W\]c\] "Ui #BcW a Ybhg#Uvci h#YgYUfW #ja dYfYmUggYgga Ybh'dXZ](#)

H]a dYfYmž< "žK]gcbž5"ž6UffUfž< "/ : i b[ž="&\$\$, f FVSUZWdbcaWē[a` S^Wsd [Y S` V VWhWab_ W f,
4WēfWh[VW UWek` fZWē[e a` bcaWē[a` S^Wsd [Y S` V VWhWab_ W f fYdcfhlc`h\Y'A]b]ghfmcZ9Xi W]hcbž
K Y`]b[hcb" [\hđ.##k k k "cYWX"cf\[#YXi #gWcc#Ł. +&+%&"dXZ](#)

Dcd\Ua "K " ">"f&\$\$- Ł'5ggYgga Ybh]hYUWmžcf'hYUWYfg. : UXX]g\`cf`Z bXUa YbhU'3žFZWack ;` fa BcSUF[UW
&*fŁž(!%%" [\hđ.##k k k "hUbXžcb\]bY"Vca #Xc\]#dXZ#%\\$\\$. \\$#\\$\(\\$\). \(\\$, \\$&\) ++\)' *](#)

K]`]Ua ž>"; "f&\$\$' Ł' [Dfcj \]X\]b\['ZYXVUW `cb'9G@gi XYbhgfik f\]hYb'Ugg\] ba Ybhg" FZW;](#) fWd Wf F7E >
<agd S↑ +fŁžŁ'

K]`]gž>"f&\$\$- Ł'5ggYgga Ybhžcf`YUfb]b[. '5`gcW]cW`h fU`UddfcUW" `b. DfcWYX]b[g`cZ. '7\Ub[]b[
W]a UhYg'. '9Xi W]hcb`žcf'gi gh]bUVY`ž h fYgž' '\$Bcj Ya Yf!' ('8YW'a VYf&\$\$, 'ž5i ghfU')UžE i YYbg`UbXž
?Yj]b; fc" [\hđ.##d\]bhg"ei hYXi "Ui #Ł-' & #Ł#Ł-' & "dXZ](#)

F YWca a YbXYX`F Ygci fWg

; `UggcbžH" f&\$\$, Ł;_ bcah[Y efgVW f SUZ[WhW_ W f, 3 bCsuF[US^Yg[VWfa 3eeWē_ W f Xad>Wsd [Y`
A Y`Vci fbY. '7i ff]W`i a `7cfdcfU]hcb

F YUXa Ubž? "/ '5`Ybž6 "f&\$\$ Ł'`DfUW]W]`d`Ubb]b['UbX`UggYgga Ybh`C] žfX`I b]j Yfg]mDfYgg

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; UfX]bYfz>""f9X"l`f&\$%&l'3eeWée_ W f S` V Wsd [Y""@cbXcb.'GU[Y"

K]U]a ž'8""ff&\$%&l'9a VYXXYX`Zcfa Uhj Y`UggYgga Ybh'6`cca]b[ħcbžl G5.'Gc'i ħcb'HfYY"

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