

EDST6730

7 \] b Y g Y ' A Y h c X ' &

H Y f a & z & \$ & &



7 ci fgY`Cj Yfj]Yk

GHJZZ`7 cbHJW`8YHU]`g

7cbj Ybcfg

BUa Y	9a U]`	5j U]`UV]`]fm	@cW]h]cb	D\cbY
7UH\`YYb`>]b	W]h\`YYb`]b4 i bgk "YXi "Ui	VmiUddc]b]a Ybh cb`m		

Hi h`c`fg

BUa Y	9a U]`	5j U]`UV]`]fm	@cW]h]cb	D\cbY
F i VmiU]b[Vc`m]b[%4 i bgk "YXi "Ui	VmiUddc]b]a Ybh cb`m		

GWXcc``7cbHJW`hZcfa U]h]cb

GWXcc``cZ9Xi W]h]cb

5f]gž8Yg][b`UbX`5fWX]hYW]h fY

; fci bX: `ccfž`A cfj Yb`6fck b`6i]`X]b[`fi &\$Ł

H. Ž`*%f&Ł`-` ,)`%`++

9. YXi W]h]cb4 i bgk "YXi "Ui

K .

5W_bck`YX[Ya YbhcZ7ci blfm

I B GK `5fngž8Yg][b`UbX`5fWk]fYWhi fY? Ybg]b[hcb`UbX`DUXX]b[hcb`Wla di gYg`UfY`Vi]hcb`5Vcf][]bU`
@UbXg"K Y`dUmci f`fYgdYWhg`hc`hY`6]X}[U`UbX` ; UX][U`dYcd`Yg`k`c`UfY`hY`7i`gfcX]Ubg`cZ`hY`gY`UbXg"
K Y`UW_bck`YX[Y`hY`5Vcf][]bU`UbX`Hc`fYg`G`fU]h`g`UbXYf`dYcd`Ygž`hY` :]fgh5i`gfcU`]Ubgžk`c`gY`UbXgž
k]bXg`UbX`k`U`fYg`k`Y`U`bck`g`UfYž`UbX`dUm`fYgdYWhi`hc`hY`f`i`b]ei`Y`j`U`i`Ygž`UbX`hY`f`V`b`h]bi]b[`UbX
YbXi`f]b[`W`h`fYg`k`\\]W`XYYdYb`UbX`Yb`f]W`hY`Z`cZci`f`b`U`h]cb`UbX`W`a`a`i`b]h`Yg`"

U[Y`W`ci`f`h`g`m`c`Z`h`Y`C`Z]W`c`Z`h`Y`D`f`c`J`]W`!`7`Ub`W`c`f`b`X][Ybci`g`[L`B`G`K`f`g`b`X\]\[Ybci`g`g`f`U`h`\[`m](#)

f 7cj YfYX'Xi f]b['hY'Wci fgY

8i Y'XUHy. '&(#\$, #&\$&&'\$) .\$\$'DA

I g]b['hY'gWtdY'UbX'gYeI YbW' dfYdUfYX'Zcf'5ggYgga Ybh%UbX'hY'ZYXVUW'fYW'] YXzdfYdUfY'U'i b]hcZ
k cf_ Zcf'GHU[Y'* k \]W'W'j Yfg'Uddfcl]a Uh'm\U'Z'hY'h'fa "'bX]W]h]j Y'Yb[h.' '\$\$\$'k cfXg"

5 ZYXVUW'g\YYhk]'VY'dfcj]XYX"

5XX]h]cbU'XYHJ]g

DfYdUfY'U'i b]hcZk cf_ Zcf'MYUF%'&'7 cb]bi Yfg'CF '6Y[]bbYfg'<G7 'W'ci fgY" 'Mci 'bYX'h'c'Ybgi fY'hY'i b]h
XYa cbgfUH'g'mci 'UfY'fYUXm'hc'd'Ub'UbX'h'UW'GHU[Y'* YZYW]j Y'n''A U_Y'gi fY'mci '\Uj Y'fYZYW]X'cb'hY
ZYXVUW'_mci 'fYW'] YX'Zcf'hY'gWtdY'UbX'gYeI YbW' 'mc#dfYdUfYX'Zcf'5ggYgga Ybh%"

\Y'i b]hcZk cf_'g\mc X' bX]W]h]Y

GdYWZjW7 f]hYf]U	11fł ————— 2fłł				
<p>: Ua]]Uf]fmk]h`UbX`fY`Yj UbW`cZdfcZYgg]cbU`UbX#cf`fYgYUfWx`]hYfUhi fY`i`gYX`hc`gi ddcfhfYgdcbgY</p> <ul data-bbox="193 443 802 551" style="list-style-type: none"> <li data-bbox="193 443 802 479">• I bXYfghUbXg`YZYW]j`Y`UggYgga YbhdfUW]W]g <li>• I bXYfghUbXg`YZYW]j`Y`UggYgga YbhdfUW]W]g 					
<p>Ghfi W]i`fY`UbX`cf[Ub]gUh]cb`cZfYgdcbgY</p> <ul style="list-style-type: none"> <li>• 					

YWh fYfg'a UmU'gc WcbYI hi U']gY UbX#cf'Ua YbX'hYgY'gdYWZWWf]Hrf]U" H\Y'fYWta a YbXYX:[fUXY']g
HbHhj Y'cb'm'gi V'YWhc'ghUbXUfX]gUhcb'dfcW'ggYg'UbX'Uddfcj U'Vm'hY'GVXcc'`cZ9Xi WWhcb'@YUfb]b[
UbX'HYUWX]b['7ca a]mYY"

GdYwZjW7 f]Hyf]U

11fł ————— 2fłł

XYHJ]`k]h.ci hdfcj]X]b[`Z ``d`Ubg

GdYWZjW7 f]hYf]U

fl ————— 2fZł

; YbYfU`Wta a YbYf#YWta a YbXU]cbg`Zcf`bYI h]ja Y.`

FYWta a YbXYX.

#&\$`fl @`DG`7F`8B`<8ł

K Y][\h]b[.

* \$i

B6. H\Y`h]W_g`]b`h\Y`j`Uf]ci`g`Vcl`Yg`UFY`XYg][`bYX`hc`dfcj`]XY`ZYXVUW`hc`ghi`XYb]g/h\YmUFY`bch[`]j`Yb`
Yei`U`k`Y][` \h]b`XYhYfa`]b]b[`h\Y`fYWta`a`YbXYX`[`fUXY`"8YdYbX]b[`cb`h\Y`bUhi`fY`cZh\Y`UggYgga`Yb]fUg_ž`
YWfi`fYfg`a`UmU`gc`WcbhYI`h`U`]gY`UbX#cf`Ua`YbX`h\YgY`gdYWZjW7f]hYf]U`H\Y`fYWta`a`YbXYX`[`fUXY`]g`
hYb]U]j`Y`cb`mž`gi`V`YWfi`hc`gh]UbXUfX]gU]hcb`dfcW]ggYg`UbX`Uddfcj`U`Vm]h\Y`GV]cc`cZ9Xi`W]h]cb`@YUfb]b[`
UbX`HYUW]b[`7ca`a`]hYY`"

gkUbx]b['h.Y'gm'UVi .g.

F Ygci fWg

DfYgW]VYX F Ygci fWg

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

Ʒmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-' ,) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'fgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$Ua '—%\$.\$\$da 'cb'k YY_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'mYUfI" Ʒmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]H'Hi fb]h]b' mci 'a UmUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYHU]b' mci f'h]W_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]H'UbmcH'Yf'fY'Yj UbhXcW a YbHgE'hc
]bWi XY'Ug'Yj]XYbVW'hc'gi ddcfhmci f'YI HYbg]cb'Udd']W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmci 'k]
Ui 'ca UH]WU'`m'fYW]j Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY' mci 'k]'`bYYX'hc'gdYW]Z]WU'`m'Ug_ 'Zc'f'cbY"
Hi fb]h]b'U'gc'dfcj]XYg'i dXUH'g'cb'H'Y]f'gmgh'Ya 'ghU'hi g'cb'Hk]H'Yf"

; YbYfU'`mž'UggYgga YbhiHUg_g'a i ghVY'gi Va]H'YX'Y'YW'fcb]WU'`mj]U'Y]H'Yf'Hi fb]h]b'cf'U'A ccX'Y
Ugg][ba YbH' 'b]bgHUbVW'g'k \YfY'H']g']g' bchidcgg]V'Yž]hk]'VY'ghUH'X'cb' mci f'Wci fgY'g'A ccX'Y'g]H'k]H'
U'HYfbUH] Y'gi Va]gg]cb'XYHU]g"

: cf]bZ'fa UH]cb'cb'\ck 'hc'gi Va]hUgg][ba YbHg'cb']bY'j]U'A ccX'Y. \`hdg. #gh XYbH'i bgk "YXi "Ui #ck!
gi Va]hUgg][ba YbH'a ccX'Y

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b[`h`Y`k cfXg`cf`]XYUg`cZc`h`Yfg`UbX`dFYgYbh]b[`h`Ya `Ug`mci f`ck b``#WUb`hU`Y`a Ubm
Zcfa gZ`Zca `XY`]VYfU`h`V`X`YU`h]b[`h`c`UW`Y`X`Y`b`h`U`m`W`c`d`m]b[`Z`ca `U`gci f`W`k]h`ci hUW`bck `YX[`Ya `Yb`h`

I BGK `[fci dg`d`U[]Uf]ga `]b`h`c`h`Y`Z`c``ck]b[`W`h`Y[cf]Yg.

7cdm]b[.`I` g]b[`h`Y`g`Ua`Y`cf`j`Y`fmg]a]Uf`k`cfXg`h`c`h`Y`cf][]b`U`h`Y`h`cf`]X`Y`U`k]h`ci hUW`bck `YX[]b[`h`Y`
gci f`W`cf`i`g]b[`ei`c`h`U`h`c`b`a`Uf`g``H`g]b`W`i`X`Y`g`W`c`d`m]b[`a`U`h`f]U`g`Z`]X`Y`U`g`cf`W`c`b`W`d`h`g`Z`ca `U`V`cc`_`Z`U`f`h]W`Y`Z`

5 WUXYa]WbZcfa Uh]cb

8i Y`tc`Yj`c`j`]b[`UXj`]W`VmB`GK` `<YU`h`z`gh` XYbh`g`a` i` gh`WXYW`Zc`f`i` dXU`h`X`]bZc`fa` Uh]cb`fY[`UfX]b[`cb`]bY`
`YUfb]b[`Zc`f`U`5`fng`z`8`Yg][`b`UbX`5`fW`X]h`W`h` fY`W`e`i` fgY`g`h`g`h`f`a` `fj`]U`A` ccX`Y`c`f`W`e`i` fgY`]bZc`fa` Uh]cb`
dfcj`]XYX`"Ł

: cf`YggYbh]U`gh` XYbh]bZc`fa` Uh]cb`fY`Uh]b[`tc`.

- fYei` Yg`hg`Zc`f`YI` h`bg]cb/
- `UH`gi` Va`]gg]cbg`[`i`]XY`]bYg/
- fYj`]Yk`c`Za` Uf`_g/
- I` B`GK` `<YU`h`UbX`G`UZ`h`m`d`c`]W`Y`g/
- YI`Ua`]bUh]cb`dfc`W`X`i` fYg/
- gdY`W`U`W`e`bg]XY`f`Uh]cb`]b`h`Y`Y`j` Ybh`c`Z`]`b`Y`gg`c`f`a`]g`U`X`j` Ybh` fY/
- gh` XYbh`Yei`]m`UbX`X`]g`U`V`]`]m/
- UbX`c`h`Y`f`Y`gg`Y`bh]U`U`W`X`Y`a`]W]bZc`fa` Uh]cb`z`g`Y`Y`

\h`d`g`.#`k` k`k`"i` bgk`"Y`Xi`"Ui` #U`f`hg`!`XY`g][`b`!`U`f`W`X]h`W`h` fY`#`gh` XYbh`]Z`#`Y`g`c`i` f`W`g`!`g`i` d`d`c`f`h`#`d`f`c`h`W`e`g`!`[`i`]XY`]bY`g`

⇒ U[Y`7` fYX]h

GmbYf[]Yg`]b`Gci` bX`&`\$`%`*`

7F ⇒ CG

7F ⇒ CG`D`fcj`]XY`f`7`c`XY`.\$`\$`\$`-` ;`