



ARTS2121

H\YUhfY`UbX`7 i ffYbh`9j Ybhg

GYa YghYf`C bY`#`&\$%



GWcc`cZH`Y`5ftg`UbX`A`YXJU`#`I`BGK`..5ftg`UbX`GcWJU`GWYbWg

7ci fgY`Cj Yfj JYk

`GHZZ7cbHJW`i8YHJ`g`

]b:k f]h]b['hc'h\Y'8YUb'UbX'dfcj]XY'U''cf][]bU''cf'Wfh]ZYX'gi ddcfh]b['XcW'a YbhU]cb"

: cf'a cfY']bZcfa U]cb'UVci h'h\Y'UhhYbXUbW'W'dfchcW'g']b'h\Y': UW'hmZ5fhg'UbX'GcW]U'
GWYbWg: \fhdg.##k k"Ufhg"i bgk "YXi "Ui #W ffYbh]gh XYbhg#UWUXYa]W]bZcfa U]cb#dfchcW'gl[i]XY']bYg#

5 UWUXYa]W]bZcfa U]cb'

: cf'YggYbh]U'gh XYbh]bZcfa U]cb'fY'U]h]b['hc.'fYei Yghg'Zcf'YI h'bg]cb/fYj]Yk'cZa Uf_g/cVW dU]cbU''\YU'h
UbX'gUZ]m/YI Ua]bU]cb'dfcW'Xi fYg/gdYW]U'W'bg]XYfU]cb']b'h\Y'Yj Ybhcz]'bYgg'cf'a]gUXj Ybh fY/
gh XYbhYei]mUbX'X]gUV']]m'UbX'ch\Yf'YggYbh]U'UWUXYa]W]bZcfa U]cbž
gYY' \fhdg.##k k"Ufhg"i bgk "YXi "Ui #W ffYbh]gh XYbhg#UWUXYa]W]bZcfa U]cb#dfchcW'gl[i]XY']bYg#

7 ci fgY'8YHJ]`g

7 fYX]hDc]bHg`*`

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

Gi V`Y`W`i`5`f`Y`U` `F`Z`W`S`f`d`W`S` `V`B`W`d`_`S` `U`W`E`f`g`V`[`W`e

5 fh]ghg`U`k`Umj`f`Y`g`d`c`b`X`'h`c`'h`Y`'j`g`g`i`Y`g`'c`Z`h`Y`f`'h`j`a`Y`"5`b`X`'h`Y`U`h`f`Y`'a`U`_`Y`f`g`'U`f`Y`'c`Z`h`Y`'b`'h`Y`'Z`f`g`h`c`'f`Y`g`d`c`b`X`'k`'Y`b`
Ub`]`g`g`i`Y`'Y`a`Y`f`[`Y`g`" `&`'h`c`]`g`'W`c`i`f`g`Y`Z`m`c`i`'k`]`"Y`i`d`'c`f`Y`'`c`k`'U`f`h`g`h`g`'`U`j`Y`'W`Y`U`h`X`'k`c`f`_`g`'h`U`h`Y`b`[`U`[`Y`'U`i`X`]`Y`b`W`g`
]b`'W`f`f`Y`b`h`Y`j`Y`b`h`g`'U`b`X`'W`c`b`h`Y`a`d`c`f`U`f`m`X`Y`V`U`h`Y`g`"K`]h`'Y`U`V`X`'j`g`g`i`Y`Z`m`c`i`'k`]`"Y`i`d`'c`f`Y`'j`h`g`'c`W`[`U`'c`f`[`]`b`g`'U`b`X`'_`Y`m`
h`]b`_`Y`f`g`Z`U`b`X`'h`Y`'a`Y`h`c`X`g`'h`U`h`h`Y`U`h`f`Y`!`a`U`_`Y`f`g`'`U`j`Y`'i`g`Y`X`'h`c`'f`Y`g`d`c`b`X`"K`]h`'h`Y`'g`_]`"g`'m`c`i`'X`Y`j`Y`'c`d`Z`m`c`i`
k`]`"V`Y`'U`V`Y`'h`c`'U`b`U`m`g`Y`'c`k`'h`Y`U`h`f`Y`!`a`U`_`Y`f`g`'j`b`h`f`j`Y`b`Y`'j`b`'c`i`f`'W`'h`'f`Y`'U`b`X`'X`Y`j`]g`'d`Y`f`Z`c`f`a`U`b`W`g`'h`U`h`
Y`b`[`U`[`Y`'U`i`X`]`Y`b`W`g`'j`b`]`g`g`i`Y`g`'h`U`h`W`c`b`W`f`b`'m`c`i`'h`c`X`U`m`'H`Y`'U`j`a`'j`g`'h`c`'Y`U`f`b`'c`k`'h`Y`'k`c`f`X`'k`c`f`_`g`'k`]h`]b`
h`Y`U`h`f`Y`'U`b`X`'c`k`'h`Y`U`h`f`Y`'k`c`f`_`g`'j`b`'h`Y`'k`c`f`X`"H`Y`]g`'j`g`'U`'W`c`f`Y`'@`Y`j`Y`'&`'W`c`i`f`g`Y`'j`b`'h`Y`'H`Y`U`h`f`Y`'U`b`X`
d`Y`f`Z`c`f`a`U`b`W`'G`h`X`]Y`g`'g`h`f`Y`U`a`"

5 h`h`Y`'W`c`b`W`i`g`]c`b`'c`Z`h`]g`'W`c`i`f`g`Y`'h`Y`'g`h`i`X`Y`b`h`k`]`"V`Y`'U`V`Y`'h`c`

- %`X`]g`W`g`g`'h`Y`'g`d`Y`W`Z`Y`X`'h`Y`c`f`Y`h`j`W`'`Z`U`a`Y`k`c`f`_`g`'U`b`X`'c`k`'h`Y`m`i`U`j`Y`'j`b`Z`i`Y`b`W`X`'d`Y`f`Z`c`f`a`U`b`W`'a`U`_]b`[`
U`b`X`'f`Y`W`d`h`j`c`b`/`
- &`"Y`i`d`'U`j`b`'c`k`'h`Y`'U`f`h`g`h`j`W`W`U`g`Y`'g`h`i`X`]Y`g`'Y`a`V`c`X`m`W`X`U`b`[`Y`g`]b`'h`Y`'Z`c`f`a`Z`'W`c`b`h`Y`b`h`Z`'U`b`X`'d`c`'h`j`W`g`'c`Z`
K`Y`g`h`f`b`'d`Y`f`Z`c`f`a`U`b`W`'g`]b`W`'h`Y`'%'`*`\$`g`"
- '`"U`b`U`m`Y`'U`b`X`'Y`i`d`Y`f`j`a`Y`b`h`k`]h`'W`c`b`h`Y`a`d`c`f`U`f`m`d`Y`f`Z`c`f`a`U`b`W`'U`d`d`f`c`U`W`X`Y`g`'h`c`'h`Y`'h`Z`g`d`U`W`'Z`h`j`a`Y`Z`
d`Y`f`Z`c`f`a`]b`[`'U`b`X`'g`d`Y`W`U`h`j`b`[`"
- (`"U`g`g`Y`g`g`'h`Y`'k`U`m`m`c`i`f`'c`k`b`'Y`i`d`c`g`i`f`Y`'h`c`'W`c`b`h`Y`a`d`c`f`U`f`m`h`Y`c`f`m`U`b`X`'d`Y`f`Z`c`f`a`U`b`W`'d`f`U`W`j`W`'`U`g`
]a`d`U`W`X`'c`b`'m`c`i`f`'U`d`d`f`c`U`W`'h`c`'h`Y`'b`U`h`'f`Y`'U`b`X`'Z`'b`W`j`c`b`g`'c`Z`'j`Y`'d`Y`f`Z`c`f`a`U`b`W`

HYUW`X`]b`[`'G`h`f`U`h`[`]Y`g`'

d`Y`f`Z`c`f`a`U`b`W`'W`U`b`'b`Y`j`Y`f`'V`Y`'X`]j`c`f`W`X`'Z`c`a`'j`h`g`'c`W`[`U`Z`'W`'h`i`f`U`Z`'h`g`h`c`f`]W`j`Z`U`b`X`'a`U`h`f`j`U`'W`f`W`'a`g`h`U`b`W`g`"
<`Y`b`W`'h`c`'g`h`i`X`m`U`d`Y`f`Z`c`f`a`U`b`W`'h`Y`i`h`]g`'h`c`'g`h`i`X`m`]h`g`'W`c`b`h`Y`i`h`h`c`"H`Y`g`Y`'h`k`]b`'h`U`g`_`g`Z`'h`c`'Y`U`f`b`'c`k`'h`c`'f`Y`U`X`'h`Y`i`h`g`
U`b`X`'W`c`b`h`Y`i`h`g`Z`f`Y`e`i`]f`Y`'a`i`'h`d`'Y`a`Y`h`c`X`g`Z`'g`c`a`Y`'h`Y`U`W`X`f`i`X`]f`Y`W`Y`X`'U`b`X`'g`c`a`Y`'g`h`i`X`Y`b`h`'Y`X`"H`Y`]g`'W`c`i`f`g`Y`'i`g`Y`g`
U`'W`c`a`V`]b`U`h`j`c`b`'c`Z`'Y`W`i`f`Y`g`'k`]h`'g`W`Y`Y`b`]b`[`g`Z`'h`c`f`]U`'g`Z`'U`b`X`'U`'Z`U`W`'j`h`U`h`X`'W`Y`U`h`j`Y`'d`f`c`W`g`g`'U`b`X`'d`f`Y`g`Y`b`h`U`h`j`c`b`"
&`"U`X`X`]h`j`c`b`Z`'g`h`i`X`Y`b`h`g`'U`f`Y`'Y`i`d`Y`W`X`'h`c`'k`c`f`_]b`X`Y`d`Y`b`X`Y`b`h`i`h`Z`'c`i`h`g`]X`Y`'c`Z`W`U`g`g`'h`j`a`Y`Z`f`Y`U`X`]b`[`Z`'h`U`_]b`[`'b`c`h`Y`g`Z`
k`U`h`X`]b`[`'j`]X`Y`c`'W`]d`g`Z`'d`'U`b`b`]b`[`'d`f`U`W`j`W`'U`W`j`j`]h`Y`g`Z`'U`b`X`'U`h`Y`b`X`]b`[`"j`Y`'d`Y`f`Z`c`f`a`U`b`W`g`"H`Y`'Y`W`i`f`Y`g`'g`Y`h`c`i`h`
[`Y`b`Y`f`U`'h`Y`c`f`Y`h`j`W`'`Z`U`a`Y`k`c`f`_`g`'U`b`X`'j`b`f`c`X`i`W`'d`U`f`h`j`W`'U`f`'h`Y`U`h`f`]W`'k`c`f`_`g`"H`Y`'h`'h`c`f`]U`'g`'U`f`Y`'c`d`d`c`f`h`b`]h`Y`g`
Z`c`f`'h`Y`'f`c`i`d`'h`c`X`]g`W`g`g`'U`b`X`'f`Y`Z`Y`W`i`c`b`'h`Y`g`Y`'W`c`b`W`d`h`g`'U`b`X`'W`U`g`Y`'g`h`i`X`]Y`g`" `&`'k`'Y`Y`_`g`'`%`\$`!`%`&`Z`'h`Y`'Y`W`i`f`Y`'U`b`X`
h`'h`c`f`]U`'g`'U`f`Y`'f`Y`d`'U`W`X`'V`m`g`h`i`X`Y`b`h`'Y`X`Z`'W`Y`U`h`j`Y`'d`f`c`W`g`g`'U`b`X`'d`f`Y`g`Y`b`h`U`h`j`c`b`g`"H`Y`]g`'X`Y`j`Y`'c`d`g`'h`Y`f`U`k`U`f`Y`b`Y`g`g`
c`Z`h`Y`f`'c`k`b`'U`V`j`]h`Y`g`'U`b`X`'f`Y`g`d`c`b`g`]V`j`]h`Y`g`'U`g`'W`'h`i`f`U`'d`f`c`X`i`W`f`g`"

F`Z`W`S`f`d`W`S` `V`5`g`d`W`f`7`h`W`f`e`'Y`i`h`Y`b`X`g`'_`b`c`k`'Y`X`[`Y`'c`Z`V`c`h`'h`Y`U`h`f`Y`'g`h`i`X`]Y`g`Z`'U`g`'W`c`j`Y`f`Y`X`'j`b`'h`Y`'U`h`k`U`m`
W`c`i`f`g`Y`'3`D`F`E`##`\$`" `7`j`b`W`d`W`U`[`Y`F`Z`W`S`f`d`W`S`'U`b`X`'d`Y`f`Z`c`f`a`U`b`W`'g`h`i`X`]Y`g`Z`'U`g`'W`c`j`Y`f`Y`X`'j`b`'h`Y`'U`h`k`U`m`W`c`i`f`g`Y`
3`D`F`E`##`\$`#`F`Z`W`>[`X`W`a`X`B`W`d`_`S`'U`W`'h`Y`i`h`Y`b`X`g`'h`Y`'W`f`f`W`'U`'c`Z`h`Y`g`Y`'W`c`i`f`g`Y`g`'V`m`Z`c`W`g`]b`[`'c`b`'U`j`U`f`]Y`m`c`Z`
d`Y`f`Z`c`f`a`U`b`W`'Y`b`f`Y`g`Z`]b`W`i`X`]b`[`'X`f`U`a`U`h`W`d`'U`m`g`Z`d`c`g`h`X`f`U`a`U`h`W`h`Y`U`h`f`Y`Z`d`Y`f`Z`c`f`a`U`b`W`'U`f`h`Z`'U`b`X`'g`h`U`b`X`!`i`d`
W`c`a`Y`X`m`'h`i`b`h`[`f`U`h`Y`g`'g`Y`Z`f`Y`Z`Y`i`j`Y`'U`b`X`'d`Y`f`Z`c`f`a`U`h`j`Y`'Y`U`f`b`]b`[`'U`b`X`'h`Y`U`W`X`]b`[`'g`h`f`U`h`[`]Y`g`'j`b`'V`c`h`'d`Y`X`U`[`c`[`m`
U`b`X`'U`g`Y`g`g`a`Y`b`h`

g]a]Uf]mfYdcfng"

5ggYgga Ybh' .; fci d'dYfZcfa UbW

GHUfhXUH. '

8YHU]`g. 'Mci 'k]`VY'U'a Ya VYf'cZU'h hcf]U`[fci d'fW'&' `ghi XYbhgk'hUhWYUH'g'U'g\cfnfW%\$a]bL'[fci d
dYfZcfa UbW""H\]g'jg'hY'Z]bU`UggYgga YbhUg_]b'h\]g'Wci fgY"Gh XYbhg'k]`fYVW]j Y'U'[fci d'dfYgYbUhc
UggYgga YbhZcfa 'k]h'U'fi Vf]WUbX'[fUXY'k]h']b'W'' 'k YY_g'cZhY'dYfZcfa UbW""GY'Z]Yj U'i Uh]cb'UbX'dYYf
fYj]Yk 'jg'hU_Yb']bhc'UWVci bhUbX'a UmfYgi 'h]b'Ub']bX]j]Xi U'a Uf_'VY]b['[]j Yb']bgf'UX'cZU'[fci d'a Uf_]b
WUgYg'cZX]gWYdUbhVcbf]Vi h]cb"

5XX]h]cbU`XYHU]`g.

: i f\Yf']bZcfa Uh]cb']bWi X]b['UggYgga YbhW]hYf]Užgi Va]gg]cb']bgf' W]cb'UbX'fUh]cbU'Y'UfY'dfcj]YX'cb
A ccX'Y"

Hi fb]h]b'gYh]b[. 'H\]g'jg'bchU'Hi fb]h]b'Ugg][ba Ybh

Gi Va]gg]cb'cZ5ggYgga YbhHUg_g

Gh XYbng'UFY'YI dYWVX'hc'di hHAY'f'buA Yg'UbX'ghi XYbhbi a VYfg'cb'Yj YfmdU[Y'cZHY]f'Ugg][ba Ybng"

Hi fb]hb'Gi Va]gg]cb

Zmci 'YbWci bHY'U'dfcV'Ya 'k \Yb'UHYa dh]b['hc'gi Va]hrci f'Ugg][ba YbhHfci [\ 'Hi fb]hbzd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-' ,) ' ' ' %cf'Ya U]'HYa 'cb'[YI HYfbU'HY'fji ddcfh4 i bgk "YXi "Ui."](#)Gi ddcfh
\ci fg'UFY' , \$\$Ua '-%\$. \$da 'cb'k YY_XUmg'UbX'-' . \$Ua '-) . \$da 'cb'k YY_YbXg'f1 *) 'XUmg'U'mYUfL'Zmci
UFY'i bUV'Y'hc'gi Va]hrci f'Ugg][ba YbhXi Y'hc'U'ZU' 'hk]H'Hi fb]hb'mci 'a UmUdd'mZcf'Ub'YI HYbg]cbZ'Vi hrci
a i ghfYU]b'mci f'h]W'Yhbi a VYfZ'ca '9I HYfbU'Gi ddcfhfU'cb['k]H'UbmcH'Yf'fY'Yj UbhXcW a Ybng'hc
]bWi XY'Ug'Yj]XYbW'hc'gi ddcfhrci f'YI HYbg]cb'Udd'jW]hcb"Zmci 'Ya U]'9I HYfbU'Gi ddcfhrci 'k]'
Ui 'ca Uh]W'mfYW'j] Y'U'h]W'Yhbi a VYfZ'Vi h]Zmci 'HY'Yd\cbY'mci 'k]'b'YX'hc'gdYW]Z]W'mUg_Zcf'cbY"
Hi fb]hb'U'gc'dfcj]XYgi dXUH'g'cb'HY]f'gmghYa 'ghU'g'cb'Hk]HYf"

; YbYfU'mZ'UggYgga YbhHUg_g'a i ghVY'gi Va]HYX'Y'YWfcb]W'mj]U'Y]H'Yf'Hi fb]hb'cf'U'A ccX'Y
Ugg][ba YbH' b]bgH'UbW'g'k \YfY'h.]g']g'bchdcgg]V'YZ'hk]'VY'g'UH'X'cb'mci f'Wci fgY'g'A ccX'Y'g]HY'k]H
U'HY'fbU]j] Y'gi Va]gg]cb'XYU]g"

@UH'5ggYgga YbhDYbU'h]Yg

5b'UggYggYX'fUg_]g'XYYa YX'UH'Z]h]g'gi Va]HYX'UZ'Yf'HY'gdYW]Z]YX'h]a Y'UbX'XUH'Ug'gYhci h]b'HY
Wci fgY '@YUfb]b['A UbU[Ya YbhGmghYa 'f@A GL"

HAY'UH'dYbU'm]g'HY'cgg'cZ) i 'cZHY'hcU'dcgg]V'Ya Uf_g'Zcf'HY'fUg_Zcf'YUW'XUmcfdUfH'HYfYcZHY
k cf_]g'UH'@UH'bYgg'k]']bWi XY'k YY_YbXg'UbX'di V]W\c'XUmg"HA]g'XcYg'bchUdd'mhc'U'fUg_'hUh]g
UggYggYX'Vi hbc'a Uf_]g'Uk UfXYX"

K cf_]gi Va]HYX'Zci fHYb'f%('XUmg'UZ'Yf'HY'Xi Y'XUH'k]'VY'a Uf_YX'UbX'Z'YXVUW'dfcj]XYX'Vi hbc'a Uf_
k]'VY'fYW'fXYX"ZHY'k cf_'k ci 'X'\Uj Y'fYW'j] YX'U'dUgg'a Uf_'Vi hZcf'HY'UH'bYgg'UbX'HY'k cf_]g'U
Wca di 'gcfmWci fgY Wca dcbYbH'U'ghi XYbhk]'VY'XYYa YX'hc'\Uj Y'a YhH'UHfYei]fYa YbH'HA]g'XcYg'bch
Udd'mhc'U'fUg_'hUh]g'UggYggYX'Vi hbc'a Uf_]g'Uk UfXYX"

K cf_]gi Va]HYX'k YbH'cbY'f%('XUmg'UZ'Yf'HY'Xi Y'XUH'k]'bchVY'UW'W'dHY'Zcf'a Uf_]b['cf'Z'YXVUW_
UbX'k]'fYW'j] Y'bc'a Uf_'cf[fUXY"ZHY'UggYgga YbhHUg_]g'U'Wca di 'gcfmWca dcbYbhcZHY'Wci fgY'U
gh XYbhk]'Ui 'ca Uh]W'mZU]'HY'Wci fgY"

GdYW]U'7cbg]XYfU]cb'5dd'jW]h]cbg

Mci 'Wb'Udd'mZcf'gdYW]U'Wcbg]XYfU]cb'k \Yb']'bYgg'cf'ch'Yf'W]FW a ghUbW'g'j]bHYfZ'Yf'k]H'mci f
UggYgga YbhdYfZ'ca UbW"

G]W_bYggza]gUXj Ybhi fY'cf'ch'Yf'W]FW a ghUbW'g'VYncbX'mci f'W'blfc''a Um

f'DfYj Ybhrci 'Zca 'Wca d'Yh]b['U'Wci fgY'fYei]fYa YbH'

f'?YYd'mci 'Zca 'UH'YbX]b['Ub'UggYggUV'Y'UW]j]mZ

f'Ghd'mci 'gi Va]hb['UggYggUV'Y'k cf_'Zcf'U'Wci fgYZ

f`G][b]Z]W]b]h]m]U]Z]Y]W]h]m]i] f]d]Y]f]Z]c]f]a] U]b]W]W]]b]U]g]g]Y]g]g]U]V]`Y]`k] c]f]_]Z]V]Y]`]h]U]`Z]c]f]a] U]`Y]b]X]!]c]Z]g]Y]a] Y]g]h]Y]f]`Y]I] U]a]]b]U]h]c]b]Z]U] W]U]g]g]`h]Y]g]h]Z]U]`U]V]c]f]U]h]c]f]m]h]Y]g]h]Z]U]`g]Y]a]]b]U]f]d]f]Y]g]Y]b]h]U]h]c]b]`c]f]U]b]m]c]h]Y]f]Z]c]f]a] `c]Z]U]g]g]Y]g]g]a] Y]b]h]

: c]f]Z] f]h]Y]f]X]Y]h]U]`g]`]b]`f]Y]`U]h]c]b]`h]c]`G]d]Y]W]U]`7]c]b]g]X]Y]f]U]h]c]b]`]b]W]i] X]b] [``K] \]Y]b]`h]c]`5]d]d]`m]Z]``<]c]k] `h]c]`5]d]d]`m]`U]b]X] `G]i] d]d]c]f]h]b] [`8]c]W] a] Y]b]h]U]h]c]b]``d]`Y]U]g]Y]`f]Y]Z]f]`h]c]`h]Y]`G]d]Y]W]U]`7]c]b]g]X]Y]f]U]h]c]b]`k] Y]V]g]h]Y]`.

[\\]h\]c\]g.\]#\]g\]h\] X\]Y\]b\]h\]i\] b\]g\]k\] "Y\]X\]i\] "U\]i\] #\]g\]d\]Y\]W\]U\]`!\]W\]c\]b\]g\]X\]Y\]f\]U\]h\]c\]b\]](#)

5 WUXYa]W<c bYghmUbX 'D`U[]Uf]ga

D`U[]Uf]ga]g`i g]b['hY`k cfXg`cf]XYUg`cZchYfg`UbX`dfYgYbh]b['hYa`Ug`mci f`ck b" #WUb`hU`Y`a Ubm
Zcfa gZ`Zca`XY`]VYfUHy`WXYU]b['hc`UWV]XYbU`mW`dm]b[`Zca`U`gci fW`k]hCi hUW_bck`YX[Ya`Ybh`

I BGK`[fci dg`d`U[]Uf]ga`]bhc`hY`Zc`ck]b[`WUHy`[cf]Yg.

7cdm]b[.`i`g]b['hY`gUa`Y`cf`j`Yfmg]a`]Uf`k`cfXg`hc`hY`cf][]bU`hY`hcf`]XYU`k`]hCi hUW_bck`YX[]b['hY`
gci fW`cf`i`g]b[`ei`chU]cb`a`Uf`g`"H`]g`U`gc`Udd`]Yg`hc`]a`U[YgZ`UfhUbX`XYg][`b`dfc`YWgZ`Ug`k`Y`Ug`
dfYgYbhU]cbg`k`YfY`gca`YcbY`dfYgYbh]b[`Ubc`hY`f`g`]XYUg`cf`k`cfXg`k`]hCi hWYX]h`

#Uddfcdf]UHy`dUfUd`fUg]b[.`W`Ub[]b[`U`Zy`k`cfXg`UbX`d`fUgYg`k`Y`a`cghm`fYU]b]b['hY`cf][]bU`
g]fi`W`fY`UbX`]bZcfa`U]cb`k`]hCi hUW_bck`YX[Ya`Ybh`"H`]g`U`gc`Udd`]Yg`]b`dfYgYbhU]cbg`k`YfY`gca`YcbY`
dUfUd`fUgYg`Ubc`hY`f`g`]XYUg`cf`k`cfXg`k`]hCi hWYX]h` #U`gc`Udd`]Yg`hc`d`]YW]b[`hc`[YhYf`ei`chYg`UbX`
dUfUd`fUgYg`]bhc`U`bYk`k`c`Yz`k`]hCi hfYZ`fYbW]b[`UbX`U`gh`XYbh`g`ck`b`UbU`mg]g`hc`Vf]b['hY`a`UHyf]U`
hc`[YhYf`"

7c`i`g]cb.`k`cf_]b[`k`]h`chYfg`Vi`hdUgg]b[`cZ`hY`k`cf_]Ug`U`dYfgcb`g`]bX]j`Xi`U`k`cf_]7c`i`g]cb`U`gc`
]bWi`XYg`dfcj`X]b[`mci`f`k`cf_]hc`Ubc`hY`f`gh`XYbhVY`Zc`fY`hY`Xi`Y`XUHy`Zc`f`Zc`f`hY`di`fdcgY`cZ`hYa`
d`U[]Uf]g]b[`Uh`Ubmi]a`Yz`dUm]b[`Ubc`hY`f`dYfgcb`hc`dYfZcfa`Ub`UWUXYa`]W]g`_`z`ghU`]b[`cf`UW`ei`]f]b[
Ubc`hY`f`dYfgcb`g`UWUXYa`]Wk`cf_]UbX`W`dm]b[`]z`c`ZYf]b[`hc`W`ca`d`YHy`Ubc`hY`f`dYfgcb`g`k`cf_]cf`gYY_]b[
dUma`YbhZc`f`W`ca`d`Y]b[`UWUXYa`]Wk`cf_]`

#Uddfcdf]UHy`W]U]cb.`7`]h]b[`gci`fW`g`k`W`Uj`Y`bchVYYb`fYUXz`k`]hCi hUW_bck`YX[]b['hY`"gYW`bXUfm`
gci`fW`Zca`k`W`_bck`YX[Y`cZ`hYa`U`g`VYYb`cVU]bYX`"

8i`d`]WU]cb`ffgY`Zd`U[]Uf]ga`"E`gi`Va`]h]b[`mci`f`ck`b`k`cf_]b`k`c`Y`cf`]b`dUfz`k`YfY`]h`Ug`dfYj`]ci`g`m`
VYYb`dfYdUfYX`cf`gi`Va`]hYX`Zc`f`Ubc`hY`f`UggYgga`Ybhcf`W`ei`fgY`Uhi`BGK`cf`Ubc`hY`fi`b]j`Yfg]m`"

7c`ffYW`fY`ZY`fY`bW]b[`dfUW]W]g.

- VYhYf'a UbU[Y'mci f'hja Y

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K YY_%`&*` : YVfi Ufm!`(` A UfVX	@YWi fy	DYfZcfa UbW`j]b`U`H]a Y`cZDcghg`f@YWi fyf.`8f 7Ufc`]bY`K`U`YŁ
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		GWFYYb]b[g"'? f]g'J YfXcbW_ž7@6 UbX'? f]g J YfXcbW_ž35FA D ° #"
K YY_-.' '\$'5df]'! '* 'A Um	@YWh fy	7 UgY 'Gh X]Yg'f@YWh fyf.'8 f'7 Ufc']bY'K U_YŁ B U]cbU' H\YUfYž! Sd: adW
	Hi hcf]U'	F YUX]b[g"'GHUZZcfxžB]W_žZca 'Ub'cf][]bU'k cf_'Vm A]WUY' 'A cfdi f[c"'&\$ \$+'! Sd: adW @cbXcb. : UYf'UbX': UYf'
		DUF_Yf!GHUfVi W_ž>Ybb]ZYf' &\$% "'5b]a U' C bhc'c []Yg'UbX' A YX]U'F YdfYgYb]U]cbg.'F cVch]Wgž Di ddYhgž'UbX' H\Y'F YU'cZI Sd: adW FZWSfdW <agd S^*) 'fl Ł' +' --' "
		GWFYYb]b[g"'A U_]b['K Uf' < cfgY"'8]f' A Uf]UbbY 9`]ch]UbX' Hca 'A cff]g"'3gefS' [S' 4daSVUSeff' Y 5abadS]fa' ž&\$%&"
K YY_ '\$. '+ A Um! '% A Um	@YWh fy	DfUW]WU' Dfc YWhf@YWh fyf.'8 f'7 Ufc']bY'K U_YŁ
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	5ggYgga Ybh	A U'cf'9ggUm8i Y Gi bXUmžA Um% ž%&") - da "'Gi Va]hj]U'Hi fb]h]b"
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F Ygci fWg

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H\YfY`]g`bc`Gh Xm?]hZcf`h\]g`Wci fgY`

F YWca a YbXYX`F Ygci fWg

H\Y`fYWca a YbXYX`fYUX]b[g`Zcf`K YY_g`%d - `UfY`Uj U]UV`Y`]b`h\Y`Wci fgY`A ccX`Y`g]h`UbX`j]U`h\Y`I BGK
a U]b`]]VfUfm`Gh XYbhg`UfY`U`gc`YbWci fU[Y`hc`WXYW`h\Y`I BGK `@]VfUfm]g`H\YUhfY`UbX`DYfZcfa UbW`
Gi V`YWh; i]XY.`\hdg.`#g] V`YWf[i]XYg`]]VfUfm`i bgk "YXi "Ui #]f]g`#h\YUhfY`

: cf`Z`f\h\Yf`gh Xm]fYgci fWg`g`gYY`U`gc`h\Y`I BGK `@]VfUfm]g`Gh XmdU[Y.`
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7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

5h\h\Y`YbX`cZ`h\Y`Wci fgY`k`Y`k`]`VY`i`g]b[`I BGK`g`
a m9] dYf]YbW`" [\hdg.`#gh`XYbh`i`bgk`"YXi`"Ui`#a`n\Y`dYf\]YbW`](#)

K`Y`k`Y`Wca`Y`Wcbg]f`i`W]j`Y`ZYXVUW`-`YgdYW]U`mk`f]h`b`ZYXVUW`f]Y`a`U]g`z`bch`g`Y`h`W`E`cb`h\Y`Wci`fgY`
W`cb`h`b`h`g]f`i`W]h`f`Y`UbX`UggYgga`Ybha`Y`h`c`Xg`-`b`ch`cb`m`Uh`h\Y`W`cb`W`i`g]cb`c`Z`h\Y`Wci`fgY`Z`Vi`h`U`gc`Ug`k`Y`[`c`
U`cb[`"

A`Ubm`UgdYW]g`c`Z`h\]g`Wci`fgY`UfY`h\Y`fYgi`hcZ]bbc] Uh]j`Y`gh`XYbhZYXVUW`Zca`dfYj`]ci`g`m`Y`Ufg`":`cf`
YI`Ua`d`Y`Z`h\Y`bi`a`VYf`UbX`[`Yb`fY`c`Z`W]gY`gh`X]Yg`]b`h\]g`Wci`fgY`U`g`V`Y`Y`b`W`Ub`[`YX`]b`fYgdcbgY`hc`gh`XYbh`
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⇒ U[Y`7`fYX]h

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