



# MTRN4110

F cVch8Yg][ b

HYfa `Hk c`##`&\$&%

GWXcc`cZA YWXUb]WU`UbX`A Ubi ZUW# f]b[ `9b[ ]bYYf]b[ `..##`I BGK `9b[ ]bYYf]b[

7ci fgY`Cj Yfj ]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg


9a U]

[9b\[ \]bYYf\]b\[ \]Gh.XYbhGi ddcfhGYfj \]Wg](#) -W ffYbhghi XYbhYbei ]f]Yg

- Y"[ "Ybfc`a Ybž`dfc[ fYgg]cbžWUg\`fYei YgržWci fgY`]ggi Yg`cf`dfc[ fUa !fY`UhYX`ei Yf]Yg

[9b\[ \]bYYf\]b\[ \]`Xigf\]U`HfU\]b\]b\[ \]`Xigf\]U`HfU\]b\]b\[ \]`ei Ygh\]cbg](#)

[I.BGK`Gh.Xm5VfcUX](#) -`gh XmiUVfcUX`gh XYbhYbei ]f]Yg`fZcf`]bVci bX`gh XYbhgk

[I.BGK`9I.WXUb\[Y](#) -`gh XYbhYI WXUb[Y`Ybei ]f]Yg`fZcf`]bVci bX`gh XYbhgk

[I.BGK`i`h`fY`Gh.XYbhg](#) -`dchYbh]U`gh XYbhYbei ]f]Yg

## 7 ci fgY'8YHJ]`g

7 fYX]hDc]bhtg '\*`

Gi a a UfmcZhY'7 ci fgY

H\Y'Wci fgY'jg'Uja YX'UhXYj Y'cd]b[ 'g\_]`g'cb`ck`hc`XYg] b'UbX'ja d'Ya YbhHAY'WUdUV']hYg'cZU'fcVch]W d'UhZcfa "'<U'ZcZhY'Wci fgY'jg'YWh fY!VUgYX'UbX'XYU'g'k ]h' hY'Zc`ck ]b[ 'WcbHYbhtg'`fbfcXi W]cb`hc`fcVch XYg] b" A YWU]ga g'UbX' ]bYa Uh]WcZk \YY'YX'fcVchg"'GYbgc'fg'i gYX'Zc'f'hY'dYfW'dh]cb'WUdUV']hYg'cZ hY'fcVch'DYfW'dh]cb'Udd'YX'hc'U`ck`hY'fcVch'hc' i bXYfgHUbX'hY'WcbHYI hcZcdYfU]cb" A ch]cb'd'Ubb]b[ UbX'Wcbfbc`cZhY'fcVch]b'Wca d'YI'WcbHYI hg" C dh]a U`d'Ubb]b[ 'fB mbUa ]Wdfc[ fUa a ]b[ 'UddfcUWXk"

fb'hY'dfUW]WU'Wca dcbYbhczhY'Wci fgYzhY'gh XYbhtg ]a d'Ya YbhdYfW'dh]cb'UbX'Wcbfbc`a cXi`Yg'UbX H'ghhYa ]b'UWh U`fcVchg"

## 7 ci fgY'5]a g

H\]g'Wci fgY'YbUV'Yg'gh XYbhtg`hc`YI d'cfY'fY'Yj UbhUgdYW]g'cZUi`hc'bca ci g'fcVch]WgmghYa g" H\YgY ]bW] XY hY'ja d'Ya YbhU]cb'cZz bW]cbg'gi Wk`Ug'gY'YWh]b[ ži bXYfgHUbX]b[ ž'UbX' ]bghU` ]b[ 'hY'gYbg]b[ 'WUdUV']hYg cZhY'fcVch'zdfcW]gg]b[ 'cZhY'gYbgc'f'a YUgi fYa Ybhtg'Zc'f'dYfZcfa ]b[ 'dYfW'dh]cb'z'UbX'Udd'm]b[ 'ck`!`UbX \] [ \!`Yj Y`Wcbfbc`dfcW]ggYg'hc`YbUV'Y'hY'fcVch]Wd'UhZcfa`hc`cdYfU]cb' ]b'Wca d'YI'WcbHYI hg"

H\]g'Wci fgY'U`ck'g'gh XYbhtg`hc`Udd'mhY'WcbW'dhtg ]bfcXi W]X ]b'hY'Wci fgY'z]b'Wca V]bU]cb'k ]h dfYj ]ci g'mUWci ]fYX`\_bck`YX[ Y'fZca`gi VYW]g'fY'UH'X'hc`Dfc[ fUa a ]b[ žA UhYa Uh]Wg'z'7 cbfbc`z A YWU]g]g'9 YW]cb]g]z ]b'cfXYf'hc`gc`j Y'hY'Wca d'YI'Wci fgY'dfc'YW]g'hUh]b]c`j Y'fUg\_g'gi Wk`Ug'hY'Z` XYg] b'UbX'ja d'Ya YbhU]cb'cZU'ga U`fcVch]Wd'UhZcfa`hc`[ ]j Y'hHAY' ]bHY` ] [ YbW]hc`cdYfU]cb' ]b'Ub'i b\_bck b WcbHYI h`HAY' ]bHY` ] [ YbW]cZhY'd'UhZcfa` ]b]c`j Yg'dYfZcfa ]b[ 'dYfW'dh]cb'fUg\_g'gi Wk`Ug'cVghUWY'XYH'W]cbz a Udd]b[ ž'd'Ubb]b[ 'UbX'j ]gi U']nU]cb'Zc'f`i a Ub ]bHYfUW]cb'k ]h' hY' ]bHY` ] [ YbhU[ Ybh'5`hYgY Wca dcbYbhtg'cZhY'U[ YbhUfY'ja d'Ya YbhX'Vm'hY'gh XYbhtg"

## 7 ci fgY'@YUfb]b[ 'Ci hWca Yg

5Zf'gi W]ggz`mWca d'Yh]b[ 'h\]g'Wci fgY'z'mci`g\ci`X'VY'UV'Y'hc`.

@YUfb]b[ 'Ci hWca Y	95`GHU[ Y'%7ca dYHbW]Yg
%`5dd'mfY'Yj UbhH'YcfY]WU`_bck`YX[ Y'dYfU]b]b[ 'hc`a cV]Y fcVch] ]bW] X]b[ 'cWca ch]cb'z'dYfW'dh]cb'UbX'`cW]nU]cb'i h] ]g]b[ cbVcUfX'gYbgc'fg'z'Uj ] [ U]cb'UbX'dUH'd'Ubb]b[ ž'Zc'f'Wca d'YI dfcVYa`!gc`j ]b[	D9%%



# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g

5ggYgga YbhHUg_	K Y][ \h	8i Y'8UHŶ	Gh XYbh@YUfb]b[ Ci hŶa Yg'5ggYggYX
E i ]n'	()	K YY_ '&ž( ž+ž- ž%\$	%ž&
#Xj ]Xi U'Dfc'YŶi	' *	K YY_ '( ž+ž%\$	%ž'&ž'
; fci d'Dfc'YŶi	%-	K YY_ '%&	%ž'&ž' ž(

## 5ggYgga Ybh8YHU]`g

### 5ggYgga Ybh% 'E i ]n

GhUfhXUHŶ: 'K YY\_ '&ž( ž+ž- ž%\$

@Yb[ h. 'l d'hc" \$'a ]bi hYg

8YHU]`g.

8YgWf]dh]cb.

"E i ]nnYg'cb' [ YbYfU' hYcf]Yg'cZa cV]Y'fcVch'UbX'Ŷa di h'f'j ]g]cb'h.UhUfY'Ŷj YfYX' ]b' 'YŶi fYg"

Bi a VYf'cZUggYgga Ybhg.

" : ]j Y'ei ]nnYg' ]b'hcHU"

; fci d#Xj ]Xi U'.

"#Xj ]Xi U'

5ggYgga YbhWf]h'f]U.

"E i ]nnYg'UfY'cb' ]bY'j ]U'A ccXY'E i ]n'UWf] ]hm'

8YUX' ]bY'žcf'UVgc'i h'ZU]`.

"B #5

F Y'YUgY'cZa Uf\_g.

"K ]h]b'%k YY\_ 'cZhY'h'ghXUHŶ"

Gi Va ]gg]cb'bc'hYg. 'j ]U'A ccXY

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

5ggYgga Ybh&. #X]j ]Xi U`Dfc`YWh

GhUfhXUHy. `K YY\_`%z( z+

8YhU]`g.

8YgW]dh]cb.

``5gg][ ba Ybhg`ZcW`g]b[ `cb`X]ZYfYbhUgdYWh`fY`Yj Ubhlc`fcVchXYg][ b"

Bi a VYf`cZUggYgga Ybhg.

``H\fYY`Ugg][ ba Ybhg`]b`lc`fU"

; fci d#bX]j ]Xi U`.

``#X]j ]Xi U`

5ggYgga YbhW]h]f]U.

``F`YZf`lc`YUW`Ugg][ ba YbhXYgW]dh]cb"

8YUX`]bY`Zc`f`UVgc`i`h`Z]`.

``)`\$`lci fg`UZf`f`h`Y`Xi`Y`XUHy`fYUW`UH`lci`f`fYXi`Wg`h`Y`a`U]`ja`i`a`UW`Yj`UV`Y`a`Uf\_g`Vm&l`E"

F`Y`YUgY`cZa`Uf\_g.

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Y

"C bY Ugg][ ba Ybh]b'rchU"

; fci d#bX]j ]Xi U'.





F Ygci fWg

F YWca a YbXYX'F Ygci fWg

@YWi fY'bcH'g'UbX'Ugg][ ba YbhgdYWZ]W]cbg:k ]''VY'Uj U]'UV'Y'hc'ghi XYbHg'j ]U'HYUa g"

H\YfY'k ]''VY'bc'hYI hVcc\_fYei ]fYX'Zcf'h]g'Wci fgY''H\Y'ghi XYbHg'UfY'gi [ [ YghYX'hc'fYUX'hY'Zc`ck ]b[ ]Z hYmk Ubh'hc'YI dUbX'hY]f'YUfb]b[ .

•F "'G]Y[ k Ufř=""F "'Bci fVU\_\g\ž'8""GWUfUa i nnU" b'f'c'Xi W]cb'hc'Ui hc'bc'a ci g'a cV]Y'fcV'chg""H\Y'A #H DfYgg"GYW'cbX'YX]h]cb"&\$%%"

I BGK '@]VfUfmk YVg]hY. \h'hdg.## k k ""]VfUfmi b'gk "YXi "Ui # A ccX'Y. \h'hdg.##a ccX'Y"Y'h'i b'gk "YXi "Ui #c[ ]b#]bXYI "d\ d

7ci fgY'9j U'i Uh]cb'UbX'8Yj Y'cda Ybh

: YYXVUW'cb'hY'Wci fgY' ]g'[ U'hYfYX'dYf]cX]WU`mi g]b[ ]j Uf]ci g'a YUbgž]bWi X]b[ 'hY'I BGK a m9I dYf]YbW'dfcW'ggž]bZ'fa U'X]gW'gg]cb' ]b'hY'Z]bU'WUgg'Zcf'hY'Wci fgYž'UbX'hY'GW'cc'g Gh XYbh'G]UZZa Y'h]b[ g" M'ci f'ZYXVUW' ]g' hU\_Yb'gYf]ci g'nž'UbX'W'cb'h]bi U' ]a d'fc] Ya YbHg'UfY'a UXY'hc'hY Wci fgY'VUgYXž]b'dUfř'cb'gi W'ZYXVUW' "

Gi Va ]gg]cb'cZ5ggYgga YbhiHUg\_g

5ggYgga Ybhgi Va ]gg]cb'UbX'a Uf\_]b[ 'Wf]hYf]U

G\ci 'X'h\Y'Wci fgY'\Uj Y'Ubmbcb!Y'YWfcb]WUggYgga Ybhgi Va ]gg]cbž'h\YgY'g\ci 'X'\Uj Y'U'ghUbxUfX  
GWkcc'Wcj Yf'g\YYH'

5`gi Va ]gg]cbg'UfY'YI dYWYX'hc'VY'bYUhbX'WYUfmgYhici H'Mci f'fYgi 'hg'UfY'h\Y'd]bbUWY'cZU`mci f'\UfX  
k cf\_'UbX'g\ci 'X'VY'hYUhx'k ]h'Xi Y'fYgdYWf'DfYgYbh]b[ 'fYgi 'hg'WYUfm[ ]j Yg'h\Y'a Uf\_Yf'h\Y'VYghWUbxWY  
cZi bXYfgtUbx]b[ 'mci f'a Yh\cX/Yj Yb']Zh\Y'bi a Yf]WU'fYgi 'hg'UfY']bVc'ffYWf'

A Uf\_]b[ [ i ]XY']bYg'Zcf'Ugg][ ba Ybhgi Va ]gg]cbg'k ]`VY'dfcj ]XYX'Uh\Y'gUa Y'h]a Y'Ug'Ugg][ ba YbhXYH]g  
hc'Ugg]ghk ]h'a YH]b[ 'UggYggUV'Y'fYei ]fYa Ybhg'Gi Va ]gg]cbg'k ]`VY'a Uf\_YX'UWwcfX]b[ 'hc'h\Y'a Uf\_]b[  
[ i ]XY']bYg'dfcj ]XYX"

@UHY'dc`]Wm

K cf\_gi Va ]hYX'`Uh'k ]h\ci hUb'Uddfcj YX'YI hYbg]cb'Vm'h\Y'Wci fgY'Wc'cfX]bUhc'f'cf'XY'Y[ UhYX'Ui h\cf]hm]g  
gi VYWWhc'U'`Uh'dYbU'micZ&\$'dYfW'bhf&\$i' E'cZ'h\Y'a U[ ]a i a 'a Uf\_'dcgg]V'Y'Zcf'h\U'UggYgga Ybh]hYa ž  
dYf'WU'YbXUf'XUm'

H\Y'`Uh'dYbU'mi]g'Udd'YX'dYf'WU'YbXUf'XUm]bWi X]b[ 'k YY\_YbXg'UbX'di V']W\c'XUmg'U'h\U'h\Y  
UggYgga Ybh]g'c] YfXi Y'"H\YfY']g'bc'dfc!fUfU'cZ'h\Y'`Uh'dYbU'miZcf'gi Va ]gg]cbg'a UXY'dUfhk Um'h\ci [ '\U  
XUm'

K cf\_gi Va ]hYX'UZ'Yf'h\Y'XYUX']bY'Zcf'UVgc'i h'ZU]' ]g'bchUWwY'dhYX'UbX'U'a Uf\_'cZnYfc'k ]`VY'Uk UfXYX  
Zcf'h\U'UggYgga Ybh]hYa "

: cf'gca Y'UggYgga Ybh]hYa gžU'`Uh'dYbU'mia UmbchVY'Uddfcdf]Uh'"H\YgY'UfY'WYUfm]bX]WUhx'']b'h\Y  
Wci fgY'ci h]bYž'UbX'gi W'UggYgga Ybhg'fYW'j Y'U'a Uf\_'cZnYfc']ZbchWca d'YhX'Vm'h\Y'gdYW]Z'YX'XU'h'  
9I Ua d'Yg']bWi XY.

% K YY\_'micb']bY'hYgh'cf'UVcfUhc'fmik cf\_'k cff'h'U'ga U'dfc'dc'f]cb'cZ'h\Y'gi VYW'ia Uf\_ž'cf  
&' C b']bY'ei ]nnYg'k \YfY'Ubgk Yfg'UfY'fY'UgYX'hc'gfi XYbhg'cb'Wca d'Yh]cbž'cf  
' " DfcZ'gg]cbU'UggYgga Ybh]Ug\_gž'k \YfY'h\Y']bhYbh]cb ]g'hc'WYU'h'Ub'Ui h\Ybh]WUggYgga Ybh'h\U  
\Ug'Ub'UVgc'i h'gi Va ]gg]cb'XU'h'ž'cf  
(" DUgg# U]'UggYgga Ybh]Ug\_g")

9I Ua ]bU]cbg

Mci 'a i ghVY'Uj U]UV'Y'Zcf'U`ei ]nnYgž'hYgh'UbX'YI Ua ]bU]cbg": cf'Wci fgYg'h\U'h\Uj Y'Z]bU'YI Ua ]bU]cbgž  
h\YgY'UfY'\Y'X'Xi f]b[ 'h\Y'I b]j Yfg]hmYI Ua ]bU]cb'dYf]cXg. : YVfi UfmZcf'Gi a a Yf'HYfa žA Um'Zcf'Hž  
5i [ i ghZcf'Hž'UbX'bcj Ya VYf#8YW'a VYf'Zcf'H' "

D'YUg'Y'j ]g]ha m' BGK 'Zcf'Dfcj ]g]cbU'9I Ua ]bU]cb'h]a YHUV'Y'di V']g'\XU'h'g": cf'Z'f'h\Yf']bZcf'a U]cb'cb  
YI Ua gž'd'YUg'Y'gY'h\Y' [9I Ua g](#) k YVdU[ Y"

GdYW]U'7cbg]XYfU]cb

žmci '\Uj Y'YI dYf]YbW'X'Ub']`bYgg'cf'a ]gUXj Ybh'fY'VYm'cbX'mci f'Wc'bf'c'h\U'hk ]`]bhYfZ'Yf'k ]h'mci f'



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

I BGK `Ug`Ub`cb[ c]b[ `Wca a ]ha Ybhlc`ZcghYf]b[ `U`W`hi fY`cZ`YUfb]b[ `]bZcfa YX`VmiUWUXYa ]W]bhY[ f]m`5`  
I BGK `gh`XYbhg`Uj`Y`U`fYgdcbg]V`]mhc`UX`YfY`hc`h`g`df]bW]d`Y`cZUWUXYa ]W]bhY[ f]m`D`U[ ]Uf]ga  
i bXYfa ]bYg`UWUXYa ]W]bhY[ f]m]UbX`]g`bchlc`YfUHX`Uhl`BGK`"B`SY[Sde\_`SfG@E|`[e VWX` VW`Se ge[`Y`  
fZWi`ad/e`ad[VWSe`aXafZW`S`V`bSee[`Y`fZW\_`aXSe`kagdai`ž`

D`U[ ]Uf]ga`]g`U`mdY`cZ]bhY`YW`i`U`h`YZ`h`h`W]b`hU`\_Y`a`UbmiZcfa`gž`Zca`XY`]VYfUHX`WX`YU]b[ `hc`UWUXYbH`m`  
W`dm]b[ `Zca`U`gci`fW`k`]h`ci`hUW`bck`YX[`Ya`Ybh`I`BGK` `Ug`dfcXi`WX`U`k`YVg]h`k`]h`U`k`YU`h`cZ`  
fYgci`fW`g`hc`gi`ddcfghi`XYbhg`hc`i`bXYfgHUbX`UbX`Uj`c]X`d`U[ ]Uf]ga`ž`]g]h`[gh`XYbh`i`bgk`"YXi`"Ui`#d`U\[ \]Uf\]ga`"](#)  
H`Y`@YUfb]b[ `7`YbhY`Ugg]ghg`gh`XYbhg`k`]h`i`bXYfgHUbX]b[ `UWUXYa ]W]bhY[ f]m]UbX`ck`bchlc`d`U[ ]Uf]gY`  
H`Y`miU`gc`lc`X`k`cf\_g`cdg`UbX`W]b`Y`d`gh`XYbhg`cbY!cb!cbY"

Mci`UfY`U`gc`fYa`]bXYX`h`UhWfYZ`h`ja`Y`a`UbU[`Ya`Ybh]g`Ub`ja`dcfHUbhdUfhcZghi`XmiUbX`cbY`cZ`h`Y`  
]XYbh]Z`YX`W]i`gYg`cZ`d`U[ ]Uf]ga`]g`d`ccf`h`ja`Y`a`UbU[`Ya`Ybh`G`h`XYbhg`g`l`ci`X`U`ck`gi`Z`W]Ybh]ja`Y`Z`c`f`  
fYgYUfW`X`Z`X`fU`Z]b[ `UbX`h`Y`dfcdYf`fY`Z`fY`bW]b[ `cZ`gci`fW`g`]b`dfY`dUf]b[ `U`UggYgga`Ybh]Ug\_g"

ž`d`U[ ]Uf]ga`]g`Z`ci`bX`]b`mci`f`k`cf`\_`k`Y`b`mci`UfY`]b`Z`fghmY`Ufž`mci`f`YW`h`fYf`k`]`c`Z`Yf`mci`Ugg]ghU`bW`hc`  
]a`dfcj`Y`mci`f`UWUXYa ]Wg\_]`g`H`Y`ma`UmUg`\_`mci`hc`cc`\_`Uhgca`Y`cb`]bY`fYgci`fW`gž`U`h`Y`bX`h`Y`@YUfb]b[`  
7`YbhY`Z`cf`gca`Y`h`ja`Yg`fYgi`Va`]h`mci`f`k`cf`\_`k`]h`h`Y`dfcV`Ya`Z]`YX`<ck`Yj`Yf`a`cfY`gYf]ci`g`]bgHUbW`g`]b`Z`fgh`

5 WUXYa ]W=Zcfa Uh]cb

7 fYX]hdc]bhg

7 ci fgY`WYX]hg`W`W`UH`X`]b`I` b]hg!C Z 7 fYX]hfl C 7 E`H`Y`bcfa U`k cf`cUX`YI dYWUh]cb`Zf`cbY`I C 7

- [A ccXY](#)
- [@UV`5WYgg](#)
- [7ca di hb\[ ` : UW\]hYg](#)
- [Ghi XYbhF Ygci fWg](#)
- [7ci fgY`Ci h\]bYg](#)
- [: UW`mHfUbg\]hcbU`5ffUb\[ Ya Ybthg`Zcf`7CJ`8!%-](#)
- [A U`YfgdUWY](#)
- [I`BGK`Hja`YhUV`Y](#)
- [I`BGK`<UbXVcc](#)
- [9ei`\]hUV`Y`@YUfb\]b\[ `GYfj`JWg](#)

⇒ U[ Y`7fYX]h

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

7F ⇒7CG

7F ⇒7CG`Dfcj ]XYf`7cXY.`\$\$\$- , ;

5W\_bck`YX[ Ya YbhcZ`7ci bhfm

K Y`UW\_bck`YX[ Y`hY`6YXY[ U`dYcd`Y`k` \c`UfY`hY`hfUX]h]cbU`W`g]hX]Ubg`cZ`hY`UbXg`cb`k` \]W`I`BGK`  
 ? Ybg]b[ hcb`W]a di g`]g`cW]hYX"

5ddYbX]l . '9b[ ]bYYfg'5i ghfU`U'f95Ł'DfcZYgg]cbU`'9b[ ]bYYf'7ca dYhYbWm  
GHUbXUfX

Dfc[ fUa ' bHYbXYX'@YUfb]b[ 'Ci hWta Yg	
? bck `YX[ Y'UbX'g_]`VUgY	
D9%"%7 ca dfY\Ybg]j YžhYcfmVUgYX'i bXYfghUbX]b[ 'cZhY'i bXYfd]bb]b[ 'bUh fU`UbX d\mg]WU`gWYbWg'UbX'hY'Yb[ ]bYYf]b[ 'Z bXUa YbHU'g'Udd']WUV'Y'hc'hY'Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%"&'7 cbWdh U`i bXYfghUbX]b[ 'cZhY'a UhYa Uh]Wgžbi a Yf]WU`UbU'mg]gžghUhgh]WgžUbX Wta di h'f'UbX']bZcfa Uh]cb'gWYbWg'k \]W' i bXYfd]b'hY'Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%" " ' b!XYdh'i bXYfghUbX]b[ 'cZgdYWU]ghVcX]Yg'cZ_bck `YX[ Y'k ]h]b'hY'Yb[ ]bYYf]b[ X]gWd`]bY	
D9%"('8]gWfba YbhcZ_bck `YX[ Y'XYj Y`cda YbhUbX'fYgYUfW'X]fYW]cbg'k ]h]b'hY Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%" ) ? bck `YX[ Y'cZYb[ ]bYYf]b[ 'XYg][ b'dfUW]W'UbX'WcbHYI h U`ZUW'c'fg]a dUW]b[ 'hY Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%"* 'i bXYfghUbX]b[ 'cZhY'gWc'dYž'df]bW]d'Ygžbcfa gžUW]c' bHUJ']h]Yg'UbX'Vci bXg'cZ gi gh]bUV'Y'Yb[ ]bYYf]b[ 'dfUW]W' ]b'hY'gdYW]ZWX]gWd`]bY	
9b[ ]bYYf]b[ 'Udd']WU]h]cb'UV']]m	
D9%"%5dd`]WU]h]cb'cZYghUV]g\YX'Yb[ ]bYYf]b[ 'a Yh'cXg'hc'Wta d'YI'Yb[ ]bYYf]b[ 'dfcV'Ya gc'] ]b[	
D9%"&'&'i YbhUdd']WU]h]cb'cZYb[ ]bYYf]b[ 'h'W]b]ei Ygž'hc'g'UbX'fYgci fW'g	
D9%" " '5dd`]WU]h]cb'cZgmg]Ya Uh]WYb[ ]bYYf]b[ 'gmb'hYg]g'UbX'XYg][ b'dfcW'ggYg	
D9%"('5dd`]WU]h]cb'cZgmg]Ya Uh]WUddfcUW]Yg'hc'hY'WcbXi W]UbX'a UbU[ Ya YbhcZYb[ ]bYYf]b[ dfc'YW]g	
DfcZYgg]cbU`UbX'dYfgcbU`Uhf]Vi hYg	
D9' "%9h]WU`WcbXi W]UbX'dfcZYgg]cbU`UW]c'i bHUJ']]m	
D9' "&'9ZYW]j Y'cfU`UbX'k f]hYb'Wta a i b]WU]h]cb']b'dfcZYgg]cbU`UbX`UmXca U]bg	
D9' " '7fYUh]j Yž]bbcj Uh]j Y'UbX'dfc!UW]j Y'XYa YUbcif	
D9' "( 'DfcZYgg]cbU`i gY'UbX'a UbU[ Ya YbhcZ]bZcfa Uh]cb	
D9' ") 'C'fXYf'ma UbU[ Ya YbhcZgY'ž'UbX'dfcZYgg]cbU`WcbXi W]	
D9' "*" '9ZYW]j Y'hYUa 'a Ya VYfg\]d'UbX'hYUa 'YUXYfg\]d	