

7ci fgY^{*}Cj Yfj]Yk

GHJZZ:7cbHJWh:8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]lm	@cWUh]cb	D\cbY
>cbUh\Ub^6c``Yb	5			\$&'-',)
		cℤ]WY`\cifg	K YVghYf"&(*8	\$+%-

@YWhi fYfg

B Ua Y	9a U]`	5j U]`UV]`]lm	@cWJhjcb	D\cbY
9f]b~6fUbb][Ub	Y"VfUbb][Ub4 i bgk "YXi "Ui	GYY'a ccX`Y'Zcf	FcVYfh	\$&`-',)
		cℤ]WY`\cifg	KYVghYf*‰	+,) (

GWXcc`7cbHJWhi±bZcfa Uhjcb

GWVcc``cZhV'5fhg`UbX`AYX]U

Fcca " ‰ž@YjY`" žFcVYfhK YVghYf*6i]`X]b[fj %(Ł

7ci fgY⁻8YHJ]`g

7 fYX]h'Dc]bhg'*

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

 $H\[g']g'U'WcifgY'UVcihdcdi\ `Uf'dYfZcfa\ UbW'']b'WcbhYa\ dcfUfm'W'hifY'''Mci'k\]```YUfb'UVcih`]jY YbhYfhU]ba YbhUWfcgg'a YX]U'UbX'h\Y'Ufhg']b'U'k\]XY'fUb[Y'cZ[YbfYgž]bWiX]b['aig]WU'gž'XUbW'ž'WcaYXmž$

5ggYgga Ybh

GYY`Wci fgY`a ccX`Y`Zcf`Z fh\Yf`XYhU]`g`cb`UggYgga Ybhž`]bWi X]b[``HUg_`]bghfi Wf]cbg`UbX`UggYgga Ybh`Wf]hYf]U"

5ggYgga YbhHUg_g

5ggYgga Ybh'llg_	K Y][\h	8i Y'8UHY	Gh XYbh@YUfb]b[CihWca Yg 5ggYggYX
A U⁄cf'9ggUm	(\$1	\$+#\$+#&\$&%*%) - *DA	%ž'&ž'' ž'(
; fci d'DfYgYblUljcbg'	' \$ı	\$(#\$,#&\$&%`%%\$\$`5A	&ž˙(
HYgh	' \$ı	\$*#\$, #&\$&%`%%) - `DA	% <u>*</u> *&

5ggYgga Ybh'8YHJ]`g

5ggYgga Ybh% A U⁄cf 9ggUm

@Yb[h\. '&\$\$\$ k cfXq

8 YW] g.

Mci f'hlg_']g'hc'k f]hY'U'&z\$\$\$k cfX'YggUmih\Uh'UbU'mgYg'U'dcdi `Uf'dYfZcfa UbWYž'dUm]b['WcgY'UhhYbh]cb'hc Wcbj Ybh]cbg'cZdUfh]WdUh]cbz'ghfUhY[]Yg'cZcdYfUh]cbz'W `hi fU``a YUb]b[gz'ghcfm`]bYg'UbX'YI dYf]Ybh]U`YZZYWfg"'Mci 'a i gh'UhYbX'UbX'XcW a Ybh'h\Y'dYfZcfa UbWYz'gi ddcfh]b['mci f'XcW a Ybh'Uh]cb'k]h\'Z]Y`Xk cf_bchYgz'UbX'WcbhYl hi U`]g]b['mci f'Yl dYf]YbW'k]h\ 'gW\c`Uf'mfYgYUfW\"

 $\label{eq:continuity} FiVf]W]bX]WUf]b[``YjY``cZdYfZcfaUbW'`U[U]bghYUW``UggYggaYbhWf]hYf]Už'kf]hHYb``ZcfaUh]jY``ZYYXVUW_Z`UbXdYfWbhU[Y`[fUXY"]$

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Hi fb]hjb'gYhjb[.'H\]g'Ugg][ba Ybh']g'gi Va]hhYX'h\fci [\'Hi fb]hjb'UbX'gh XYbhg'Xc'bchgYY'Hi fb]hjb q]a]`Uf]hmfYdcfhg"

5ggYgga Ybh&; fci d DfYgYbhUh]cbg

@Yb[h\.') a bi hy dyfZcfa UbW UbX') \$\$ k cfXq

8 YHJ] g.

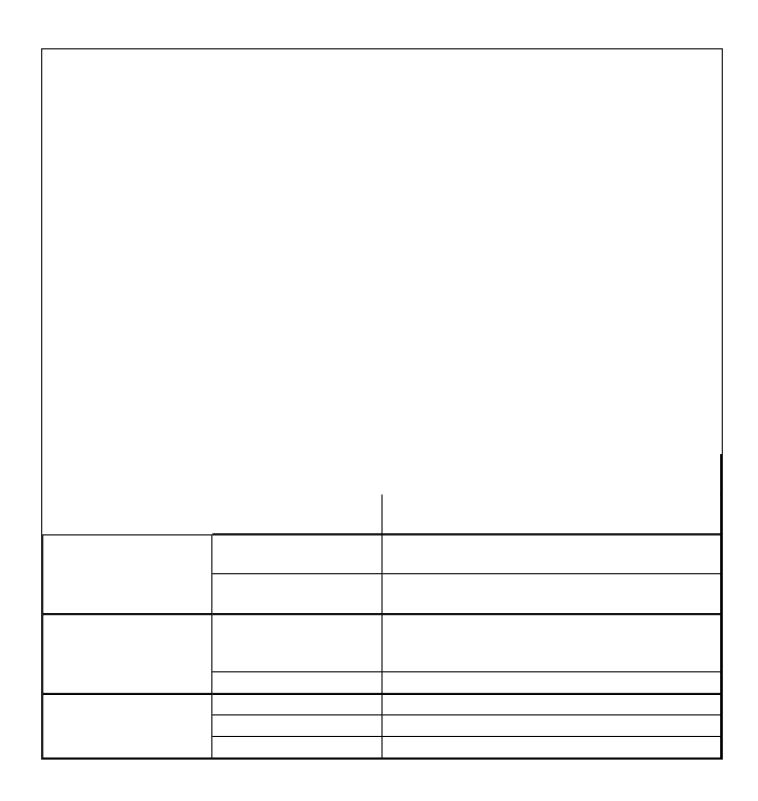
Mci f'hUg_']g'hc'k cf_']b'U'[fci d'cZ&!('ghi XYbhg'hc'WfYUhY'Ub'YbhYfhU]b]b['Z]j Y!a]bi hY'dYfZcfa UbWYž gi]hUV'Y'Zcf']b'U'] Uf]Yhmg\ck ž'XfUk]b['cb'U'[YbfY'cZdcdi 'Uf'YbhYfhU]ba YbhWcj YfYX']b'h\Y Wci fgY"'9UW\'[fci d'k]``'gi Va]h'U'k f]hhYb'fYdcfhf) \$\$'k cfXg'dYf'ghi XYbh\ž'XcW a Ybh]b['h\Y'fYgYUfW\ i bXYfhU_Yb'UbX'YUW\'ghi XYbh\gi Wcbhf]Vi h]cbž'UbX'dfcj]X]b['U'`]ghcZfYZYfYbWfg'Zcf'h\Y'[fci dfg'k cf_"'9UW\ qhi XYbhk]``'U'gc'Wca d'YhY'U'dYYf'fYj]Yk "

FiVf]W]bX]WUf]b[``YjY``cZdYfZcfaUbWY`U[U]bghYUWX`UggYggaYbhWf]hYf]Už'kf]hhYb`giaaUfjjY`ZYYXVUW_žUbX`dYfWbhU[Y`[fUXY

 $\text{H\local} \ \, \text{H\local} \ \, \text{H\local} \ \, \text{H\local} \ \, \text{Y\local} \ \, \text{H\local} \$

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Hi fb]h]b gYhn]b[. .



FYgci fWyg

DfYgWf]VYX F Ygci fWfg

FYei]fYX fYUX]b[g

5 "fYei]fYX fYUX]b[g'UfY'Uj U]`UV`Y']b'h\Y'`]VfUfmik]h\ ``]b_g'Zfca 'A ccX`Y''`Gca Y'gci bX'UbX'j]XYc fYWcfX]b[g'UfY'U`gc'Uj U]`UV`Y'cb`]bY''

Mci 'UfY'YI dYWYX'hc'df]bhici hicf'a Uf_'i d'U'X][]hU`'WcdmicZh\Y'fYUX]b[g'Zcf'YUW\k YY_'UbX'Vf]b['h\Ya 'hc WUgg"'-₹`]b_g'hc'h\Y'fYUX]b[g']b'A ccX`Y'Xc'bchk cf_žmci 'UfY'YI dYWYX'hc'gci fW''h\Y'fYUX]b['X]fYWhmZca h\Y'`]VfUfmWUhU`c[i Y'cf'XUhUVUgY'mci fgY`ZUbX']bZcfa 'h\Y'`YWhi fYf']a a YX]UhY`mih\Uhih\Y``]b_']g'bchk cf_]b["6fc_Yb``]b_g'UfY'bch'Ub'YI W'gY'Zcf'bch\Uj]b['gci fWYX'UbX'fYUX'h\Y'fYUX]b[g'mci fgY`j Yg"

FYWca a YbXYX FYgci fW/g

FYgYUfWX Zi fh\Yf

Gi [[Ygh]cbg Zcf Z ft\ Yf'fYgYUfW\]b't\ Y`]VfUfmUbX'cb`]bY'UfY']bWi XYX']b't\ Y'Wci fgY'WcbhYbt''Wci 'WUb'i gY t\ YgY'Ug'gtUft\]b['dc]bh'Zcf'fYgYUfW\]b['mci f'YggUmUbX'Ug'Z ft\ Yf'fYUX]b['cb'tcd]Wg'mci 'Z]bX]bhYfYgh]b["'K \YfY'fYgci fW'g'Zcf'Z ft\ Yf'fYgYUfW\ 'UfY'bch'Uj U]'UV`Y'cb`]bYž't\ Yma UmVY'Vcffck YX'Zfca t\ Y']VfUfm-'U`]b_'tc't\ Y']VfUfmfYWcfX']g'dfcj]XYX'Zcf't\ YgY"'

H\Y``]VfUfmcZYfg`fYgci fW'g`]b`U`j Uf]YhmcZZcfa Uhg`—`cb`]bY`Uff]WYgž'df]bhYX`Vcc_gž'Xj X`fYWcfX]b[g`UbX ghfYUa]b['j]XYc"`Mci `WJb`UWWYgg`U```h\Y`5F HG&%&'``]VfUfmfYgci fW'g`X]fYWhmUbX`mci `WJb`fYUX`a cfY UVci h`]VfUfmqYfj]WYg`Zcf`qh XYbhg`Uh\hd.#]VfUfm'i bgk "YXi "Ui "`

Ghi XYbhgʻUfYʻU`gcʻYbWci fU[YX`hcʻVf]b[ʻfY`Yj Ubha UhYf]U`gʻ]bhcʻWUggʻ—`]bWi X]b[ʻUfh]WYgʻ]bʻh\Yʻa YX]Už j]XYcʻfYWcfX]b[gždYfZcfa UbWlʻfYj]Yk gʻUbX`]bZcfa Uh]cbʻUVci hi dWca]b[ˈdYfZcfa UbWlg"

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

JUijb[mcifZYYXVUW_

Ghi XYbhiZYXVUW_`]g`[Uh\YfYX`h\fci [\ci hh\]g`Wci fgY`Vch\`Vm]bZcfa U``ZYYXVUW_`gYgg]cbgžVm A m9I dYf]YbW'`dfcW'ggYg`UbX'j]U`ghi XYbhiUggYgga Ybhg`k \]W\ž'dUfh]W``Uf`m]b`h\Y`WUgY`cZdfYgYbhUh]cbg`]b h\]g`Wci fgYž'UfY`XYg][bYX`hc`]bX]WUhY`k \YfY`ghi XYbhg`k ci `X``]_Y`hc`gYY`WcbhYbh`]b`h\]g`Wci fgY`Wcj Yf]b["5X^`gha Ybhg`hc`h\Y`Wci fgY`WcbhYbhždfYgYbhUh]cb`a cXY`UbX`ghfi Wfi fY`\Uj Y`VYYb`a UXY`h\]g`mYUf`VUgYX`cb ghi XYbhZYYXVUW_`Zca 'fYWbhmYUfg"`9UW\`mYUf`bYk 'WcbhYbh]g`UXXYXž`fYZYWf]b['fYVWbhXYj Y`cda Ybhg`]b fYgYUfW\ž'UbX`gca Y`c`X`WcbhYbh]g`fYa cj YX"

K \ Uhfaj bYk

@UghmYUf'k Y'UXXYX'bYk 'cb`]bY'`YUfb]b['UWjj]ljYg'Yl HYbX]b['H\Y'fUb[Y'cZdcdi `Uf'dYfZcfa UbWY'k Y'`YUfb UVci hUbX'XYYdYb]b['Yb[U[Ya Ybhk]h\'dUff]W'`Uf'WUgY'gh X]Yg"'K Y'U`gc'a cj YX'hc'U'bYk 'dUffYfb'cZ XY`]j YfmžYl HYbX]b['H\Y'f]a Y'Zcf'YUW\'h hcf]U``hc'dfcj]XY'a cfY'cddcfh b]hJYg'Zcf']bHYfUWfj Y'`YUfb]b['ž'UbX XY`]j Yf]b['h\Y'Wci fgY'cj Yf'-'k YY_g'k]h\'\U'VfYU_']b'k YY_'*"'Cj Yf'fYWYbhmYUfgž'gh XYbhg'\Uj Y'VYYb'[]j Yb a cfY'cddcfh b]hJYg'hc'`YUfb'UVci ha i g]WU`'h\YUffY'UbX'dcdi `Uf'XUbWYž'UbX'a cfY'gWcdY'hc'VYWca Y'UWfj Y'YUfbYfg']b'h hcf]U`g"'5bch\Yf']bbcj UhJcb']g'h\Y'Zcfa UhZcf'[fci d'dfYgYbfUhJcbg'UbX'cddcfh b]hmZcf fY\YUfgU`"

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

Hirtholdbisjoyca]gg]cb

⊋mci YbWci bhYf`U'dfcV`Ya k\Yb`UhYa dhjb['hc'gi Va]hmci f`Ugg][ba Ybhh\fci [\'Hi fb]hjbž'd`YUgY
hY`Yd\cbY`9| hYfbU``Gi ddcfhcb'-',,)'''' %cf`Ya U]``h\Ya 'cb'Y! hYfbU`hY`hgi ddcfh4 i bgk "YXi "Ui "'`Gi ddcfh\ci fg`UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY_XUmg`UbX'-.\$\$Ua '-').\$\$da 'cb'k YY_YbXg`fl *) 'XUmg`U'mYUfŁ'''⊋mci UfY'i bUV`Y'hc'gi Va]hmci f`Ugg][ba YbhXi Y`hc'U'ZJi `hk]h\'Hi fb]hjb`mci 'a UmUdd`mZcf'Ub'Y! hYbg]cbžVi hmci a i ghfYhJ]b`mci f`hj\\Yhbi a VYf'Zfca '9| hYfbU``Gi ddcfhfU'cb['k]h\'Ubmch\Yf`fY`Yj UbhXcW a YbhgŁ'hc
]bWi XY'Ug'Yj]XYbWY'hc'gi ddcfhmci f'Yl hYbg]cb'Udd`]\WJhjcb'''⊋mci 'Ya U]`'9| hYfbU``Gi ddcfhmci 'k]``

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

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i=hWJbihU_Yia Ubm Zcfa gžZfca iXYi]VYfUhYiWXYUh]b[ihciUWW]XYbhU`mWcdm]b[iZfca iUigci fWYik]h\ci hiUW_bck iYX[Ya Ybh'

IBGK [fcidg'd'U[]Uf]ga]bhc'h\Y'Zc``ck]b['WUhY[cf]Yg.

• i bXYfgHJbX'mci f'f][\hg'UbX'fYgdcbg]V]`]h]Yg'Ug'U'gh XYbh'Uhil BGK