# **ARTS2900**

; `cVU``: Ya ]b]ga g. '7 ca dYh]b[ 'J ]g]cbgž'J Ufm]b[ '< ]ghcf]Yg

HYfa 'C bY''##'&\$&%

# 7ci fgY<sup>.</sup>Cj Yfj ]Yk

i		
I		

## 7ci fgY 8YHJ] g

## 7 fYX]hDc]bhg \*

## Gi a a UfmcZh\Y'7ci fgY

H\]g`Wci fgY`Wcbg]XYfg`Vch\`ZYa ]b]ghUthYa dhg`hc`cf[ Ub]gY`[`cVU``miUWfcgg`fUW]U`žYh\b]WUbX`bUh]cbU`Vci bXUf]Ygž'UbX`X]ZZYfYbW'g`]b`ZYa ]b]ghghfUhY[]Yg`UbX`j ]g]cbg`Zcf`h\Y`Z hi fY"`Mci `k ]```hfUW'`h\Y Ya Yf[ YbW'`UbX`Wcbh]bi Uh]cb`cZhk c`Wca dYh]b[``hfUX]h]cbg`—`fYZcfa `UbX`fYj c`i h]cb`—`Zfca `UbUfW\]gh k ca Yb'g`UWhj ]ghg`h\fci [\`hc`WcbhYa dcfUfmhfUbgbUh]cbU``UbX`dcghWc`cb]U``ZYa ]b]ga g"`Mci `k ]```U`gc YI Ua ]bY`fYW'bhZYa ]b]ghUWhj ]hmh\Uh\Ug`[ UfbYfYX`[`cVU``UhhYbh]cb`UbX`Wcbhfcj Yfgmžgi W\`Ug`=g`Ua ]W ZYa ]b]ga `UbX`Di ggmF ]ch''H\fci [\ci hk Y`\][\`][\hcb[ c]b[ `Wf]h]ei Yg`cZh\Y`i b]j YfgU`]ghWU]a g`cZgca Y Zcfa g`cZZYa ]b]ga ž]bWi X]b[`=bX][ Ybci g`UbX`]bhYfgYWhcbU``Wf]h]ei Yg"

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

- %" 8Ya cbqlfUlY 'U'VfcUXž'Wfcgq!W 'hi fU'i bXYfqlUbX]b[ 'cZ[ 'cVU''ZYa ]b]qa q
- &" ⇒XYbrlZm Ymrh\Ya YgžXYVUhYgʻUbX WcbWYdhgʻ]bʻZYa ]b]gh\\]ghcfmUbXʻgWkc`Ufg\]d"
- ' " 7 cbghfi Whuf[i a Ybhgʻi g]b[ʻ[YbXYfʻUbX#cfʻZYa]b]ghUbU`mg]gʻUbXʻfYgYUfWkʻ]bʻk f]hhYbʻUbX#cfʻj YfVU`Zcfa "
- ("5ffjW'`UhY`Ub`i bXYfghUbX]b[`cZ\ck`WUggžfUWY`UbX#cf`gYIiU`]hm`]bZcfa 'ZYa]b]ga#g`\]ghcfjWU``m`UbX ]b`h\Y`dfYgYbh'

### HYUWX]b[ GhfUhY[]Yg

H\]g'Wci fgY'k ]``\Y`d'mci `XYj Y`cd'U'VfcUX'\]ghcf]WU`UbX'Wfcgg!W'h fU`i bXYfgHUbX]b[ `cZ[ `cVU`ZYa ]b]ga g UbX']g'XYg][ bYX'hc'XYYdYb'mci f'g\_]``g']b'Wf]h]ei ]b[ `gW\c`Ufm`]hYfUh fYz'Wcbghfi Wh]b[ `mci f'ck b'Uf[ i a Ybhg UbX'WcbXi Wf]b[ `fYgYUfW\"@YWi fYg'k ]``dfcj ]XY'Wfi WJU``VUW\_[ fci bX']bZcfa Uh]cb'UbX']bHfcXi W'`mci 'hc'\_Ym XYVUhYgz'h\]b\_Yfg'UbX'h\Ya Yg']b'ZYa ]b]gh\]ghcfmUbX'[YbXYf'ghi X]Yg"'\d\notation hi hcf]U`gz'mci 'k ]```dUfh]W]dUhY']b X]gW gg]cb'cZh\Y'gW\c`Ufg\]d'UbX'`YWh fY'a UhYf]U'z'[ i ]XYX'Vmh hcf]U'`ei Ygh]cbg''Mci 'k ]```U'gc''YUX X]gW gg]cb']b'Ub'U'`cWUhYX'k YY\_z']bHfcXi W]b[ 'bYk 'a UhYf]U`UbX\cfei Ygh]cbg''r mci f'WUgga UhYgz'h\YfYVm YI hYbX]b[ `mci f'fYgYUfW\"UbX'UbU'mh]WU'`g\_]``g''A mhYUW\]b[ `ghfUhY[ m]g'hc'YbWci fU[ Y'mci f'Wf]h]WU` Yb[ U[ Ya Ybhk ]h\ Wci fgY'a UhYf]U`UbX'hc'\Y'd'XYj Y`cd'mci f'k f]hhYb'UbX'j YfVU``Wca a i b]WUhcb'h\fci [\ WUgg'X]gW gg]cb'UbX'k f]hhYb'fYgdcbgYg'hc'gY'YWhYX'hi hcf]U'`ei Ygh]cbg''`H\Y'Wci fgY'k ]``Z fh\Yf'XYj Y`cd mci f'fYgYUfW\"xg\_]``g'j ]U'U'fYgYUfW\"YggUmk \]W\"fYei ]fYg'mci 'hc'i bXYfhU\_Y']bXYdYbXYbhfYgYUfW\"cb'U qdYWZWhcd]W''

## 5ggYgga Ybh

FYei]fYaYbhg'Zcf'Kf]hhYb'Kcf\_

Gi Va ]gg]cb

 $\label{thm:conditional} Hi hcf] U``dUdYfg`UbX`fYgYUfW\`YggUmg`g\ci~`X`VY`gi~Va~]hhYX`Y`YWfcb] WU``mhc`Hi~fb`±i±b`cb`A~ccX`Y''`D`YUgY~gi~Va~]hhc'h\Y'Hi~fb`±i±b`dcfhU``k~]h\`mci~f`hi~hcf'g`bUa~Y`cb`]h'$ 

## 5ggYgga Ybh'HUg\_g

5ggYgga Ybh'HJg_	K Y][\h	8i Y <sup>.</sup> 8UhY	

.

#### 5ggYgga Ybh& Hi hcf]U`FYgdcbgYg

**@Yb[h**\.'\*'l'&\$\$'k cfXg

8YW]`q.

: YYXVUW\_'j ]U']bX]j ]Xi U`'Wca a Ybhgž'fi Vf]WUbX']b!WUgg'X]gW gg]cb"'

#### 5XX]h]cbU`XYhU]`g.

HI HCF =5@F9GDCBG9G'DUffg'='UbX'=\(\frac{\pi}{2}\)fc 'VY'gi Va ]thYX'fc'Hi fb'=\(\frac{\pi}{2}\)fcb'AccX'Y'Vm(da 'cb'th\Y' : f]XUmcZK YY\_'('fDUfh'=\(\frac{\pi}{2}\)UbX': f]XUmcZK YY\_'\(\frac{\pi}{2}\)fDUfh'&''

K Y][\h'+") | 'dYf'fYgdcbgY'| '\* 1'() |

"9UW. k YY\_žci fih hcf]U`g`UfY`cf[ Ub]gYX`Ufci bX`h\fYY`hc`Zci fiei Ygh]cbg`VUgYX`cb`YggYbh]U``fYUX]b[ g`UbX h\Y``YWi fY"'H\YgY`ei Ygh]cbg`UfY`XYg][ bYX`hc`Yb[ U[ Y`mci `k ]h\`h\Y`\_Ymh\Ya Yg`cZh\Y`Wci fgY`UbX`ZYa ]b]gh gW\c`Ufg\]d"'K \]'Y`k Y`k ]```U]a hc`X]gW gg`U``ei Ygh]cbg`]b`WUgg`f]bW X]b[ `]b``YWi fYgŁZh\]g`UggYgga Ybh]g a cfY`gdYW]Z]W`cj Yf`h\Y`Wci fgY`cZ`gYa YghYf`mci `UfY`hc`Ubgk Yf`G± `ei Ygh]cbg`Zfca `X]ZZYfYbhk YY\_g` ]"Y"'cbY`ei Ygh]cb Zfca `g]l `X]ZZYfYbhk YY\_g` fgc`bYj Yf`Ubgk Yf`hk c`ei Ygh]cbg`Zfca `h\Y`gUa Y k YY\_L'"H\]g`UggYgga Ybhk ]```VY`gi Va ]hYX`]b`hk c`dUffg`—'h\Y`Z]fghUhh\Y`YbX`cZK YY\_'(`k]```UXXfYgg`HK C ei Ygh]cbg`Zfca `K YY\_g`%("'H\Y`gYWcbX`gi Va ]gg]cb`]g`Uhh\Y`YbX`cZK YY\_'%\$`UbX`k]```Wcbg]ghcZ: C I F fYgdcbgYg`Zfca `K YY\_g`)!%\$"'H\Y`fYgdcbgYg`g\ci `X`VY`Uddfcl ]a UhY`m&\$\$`k cfXg`UbX`fYZYfYbWX`k]h\ZchbchYgz`h\ci [ \`bc`V]V`]c[ fUd\m]g`bYWfggUfmf]Zmci `W\ccgY`hc`i gY`A @5`cf`g]a ]`Uf`mci `k]```dfcj ]XY`U fYZYfYbW``]ght"

#### ; YbYfU`; i ]XUbWY.

5g·mci ·k ]```gYYž'h\YfY`]g`U'a ]I ·cZei Ygh]cbg'—'gca Y`]bj ]l\Y'U'a cfY`XYg\W]dh]j Y`fYgdcbgYž'ch\Yfg`Zc\W g`cb UbU`mg]g`UbX`]b\Zcfa YX`cd]b]cbž'ch\Yfg`U'a ]I ·cZVch\`f]"Y"'mci ·XYa cbghfUhY`mci ·\Uj Y`i bXYfghccX`U \\cb\W'dh'cf`Uf[ i a Ybh'UbX`h\Yb`mci ·Yb[ U[ Y`k ]h\ ]h\W]h\W'\mž'h\Uh']g`mci ·UggYgg`]hZJ]f`mt"

#i]g'bch'U`k Umg'bYWggUfmhc'Yb[U[Y'k]h\YUW\fYUX]b['Zcf'h\Uhk YY\_']Zh\Y'fYUX]b[']g'bch'X]fYWhmfY`Yj Ubh hc'h\Y'ei Ygh]cb"8c'[Yh]bhc'h\Y'\UV]hcZfYZYff]b['hc'gW\c`Ufg'Vm'h\Y]f'bUa Y'fUh\Yf'h\Ub'i g]b['h\Y'[YbYf]W hYfa ''h\Y'fYUX]b[#g'''Gca Yhja Yg'h\Y'`YWhi fY'k]``\Y`d'mci 'Ubgk Yf'h\Y'ei Ygh]cbžVi h'U[U]b']h]g'bch bYWggUfmhc'a Ybh]cb'h\Y'`YWhi fY']Zh\]g']g'bch'h\Y'WlgY"

91 ffU fYUX]b[ ']g bchYl dYWYX Vi h]Zmci 'Xc 'Z]bX a UHYf]U`fY`Yj Ubhhc h\Y ei Ygh]cb mci 'WUb']bWi XY ']hžVi hbchUhh\Y Yl dYbgY cZh\Y YggYbh]U`fYUX]b[ "

#### DfYgYbhJh]cb#gi Va ]gg]cb.

H\]g UggYgga Ybh]g hc VY gi Va ]hhYX Ug cbY ZYY ZcfYUWX ]bghU`a Ybh''

D`YUgY`ghUhY`h\Y`Z````ei Ygh]cb`Uhih\Y`hcd`cZYUW\`fYgdcbgYžbch`f`ghK YY\_`%ZE`(

FYZYfYbWJb[ 'gmghYa.

\hdg.#gh XYbh'i bgk "YXi "Ui #cchbchY!V]V`]c[fUd\mcf!cl ZcfX!fYZYfYbW]b[!gmghYa

CF.

\hdg.#ghi XYbh'i bgk "YXi "Ui #\Ufj UfX!fYZYfYbW]b[

 $: cf'h\ ]g'UggYgga\ Ybhz']Zmci 'i gY'C \ |\ ZcfX'f]"Y"' ZcchbchYgŁ'bc'V]V`]c[fUd\ m]g'bYYXYX'Ug'ZcchbchYg'[]j Y'a Yh\Y'Z\ ```fYZYfYbWY"$ 

⊋mci i gY'<Ufj UfXžd`YUgY`]bWi XY`U`fYZYfYbW'``]ghUhih\Y`YbX"

: YYXVUW\_. 'H\Y'hi hcf]U``fYgdcbgYg`k]```VY`a Uf\_YX`]b`Hi fb`\\\ i\\\ 'ffi Vf]WUh\U\XYX`Zcf`DUfh\\\\'i\\\ 'mci f`[fUXYUbX`ZYYXVUW\_k]```VY`Uj U]`UV`Y`j]U`A ccXY`hYb`XUmg`Zfca 'gi Va]gg]cb"'\\\ci k]```VY`UggYggYX`cb`\ck

G\cfhXYg\f]dh]cb.: fca 'K YY\_'&z'YUW\'h hcf]U``k]``ZYUh fY'U'ZJ\J]hUh]cb'dUbY``fUgg][bYX`]b'Z]fghh hcf]U``lb K YY\_'\&z'cb'h\Uhk YY\_'g'hcd]\\deltacdYb]b['h\Y'gY\&bX'\ci f'ff\YfY'UfY'gca Y'j Uf]Uh]cbg'cb'h\]g\z''H\Y'dUbY``]g cf[Ub]g\X']b'U'g]a ]`Uf'ZJg\]cb'hc'U'\\deltabZ\fYb\W'dUbY``k\YfY'dfYgYbhYfg'YU\X'dfYgYbhU'g\cfhH\'\_icb'U gdY\JZ\WYI Ua d'Y'cZU'[YbYfU``h\Ya Y''H\Y'dUbY``h\Yb'X]g\W gg'h\Y'h\Ya Y'[YbYfU``mUbX']b'\deltabj'YfgUh]cb k]h\'h\Y'fYghcZh\Y'\WUgg'''H\Y'h hcf'k]``\WUJf'h\Y'dUbY`''9U\X'dUbY``]ghk]``i gY'U'dck Yfdc]bhfcf Yei ]j U'Ybhz'h\Uhk]``U'gc'VY'UggYggYX'''A cfY'gdY\JZ\W[i]XY`]bYg#gi [[Ygh]cbg'UfY'Uj U]'UV'Y']b'h\Y'Zc'XYf Zcf'h\Y'XYg][bUhYX'kYY\_ffA ccX'Yz''

•

F UhjcbU`Y. 'H\Y`dUbY``]g`XYg][ bYX`hc`Ybf]W\`ci f`[ YbYfU``X]gW gg]cb`]b`h\Y`Z]fgh\ci f`UbX`hc`di hghi XYbhg`]b W\Uf[ Y`cZZJW]`]hUhjb[ `X]gW gg]cb"'8 Yj Y`cd]b[ `U`dck Yfdc]bhU``ck g`ghi XYbhg`hc`h\]b\_`UVci h\ck 'hc`a cgh YZYWfj Y`mUbX`WcbWjgY`mdfYgYbh]bZcfa Uhjcb`]b`Ub`Yb[ U[ ]b[ `ZJg\]cb`UbX`k ]h\`j ]gi U``U]Xg`f]"Y"'i gY d]Wfi fYgŁ"'Ghi XYbhg`k ]```bYYX`hc`gh]W\_`hc`h]a Yž`gc`a UmbchWcj Yf`U```h\Y`a UhYf]U``]b`h\Y]f`dck Yfdc]bhk \]W\ ]g`k\mh\Y`dck Yfdc]bh@f`; cc[ `Y`G`]XYgQ]g`UggYggYX`cb`]hg`ck b`a Yf]hg`Ug`dUfhcZh\Y`UggYgga Ybh'

.

<ck 'dUbY`g`UfY`Ugg][ bYX. 'H\YfY`k ]```VY`Y][ \hk YY\_g`cZdUbY`g`—'Zfca 'K YY\_g`&!%\$"'±b`k YY\_'%
j c`i bhYYfg`k ]```VY`gci [ \hiZcf'h\Y`K YY\_'&'dUbY`": cf`Yj Yfmch\Yf`k YY\_'h\Y`dUbY``]ghg`k ]```VY`Ugg][ bYX
fUbXca `m—']"Y"'hi hcf'dUggYg`Ufci bX`Ub`Ybj Y`cdY`UbX`mci 'gY`YWhmci f`k YY\_'UbX`gdYU\_Yf'bi a VYf'Zfca 'h\Y
Ybj Y`cdY`fY"[ "'K YY\_') žgdYU\_Yf'' Ł"'C b`A ccX`Yž'mci 'k ]```Z]bX`U`WUgY`ghi Xm#YI Ua d`Y#h\Ya Y`Ugg][ bYX`hc
mci f`gdYU\_Yf'bi a VYf"</pre>

.

I ZSf[X; US` fbdWeW fa` fZWi WW]; S\_ See[Y`WW1'±b'K YY\_'%'h hcf]U'ž'UZNYf'h\Y'dUbY`g'UfY'Ugg][bYXž'h\Y h hcf'k]````YUj Y'ha Y'hc'Xc'gk Udg"'H\]g'i gi U``mgUh]gZ]Yg'Yj YfmVcXm"'-Zgca Yh\]b['Wca Yg'i d'Xi f]b['hYfa ž WcbhUWhmci f'hi hcf'UbX'g\Y'k]```cf[Ub]gY'U'gk Ud'k]h\'Ubch\Yf'ghi XYbh']b'h\Y'WUgg'-'^gha U\_Y'gi fY'mci []i Y'\Yf'ha Y'hc'Xc'gc"

.

#### <ck Xc h\Y dUbY`g k cf\_</pre>

H\Y'Ya d\Ug]g']g'cb'g\cfhWcblf]Vi ljcbg'cZ) 'a ]bi ll/g'YUW\"'DUbY``]glg'k ]``'g]hi d'ZfcbhdUbY`!glmY'UbX'YUW\gdYU\_Yf'k ]``'H\\_Y'h\Y]f'Vf]YZhi fb'Uhlh\Y'`YWh fb'hc'Vf]YZmX]gWigg'h\Y]f'Yl Ua d'Yž'k ]h\'h\Y'UJXY'cZU dck Yfdc]blz'VYZcfY'g]hh]b[ 'VUW\_'Xck b'k ]h\'h\Y'fYghcZh\Y'dUbY`''5ZhYf'YUW\'dUbY``]glg'\Ug'gdc\_Ybž'h\Y h' hcf'k ]``'fYgdcbX'Ug'7\U]f'UbX'cdYb'i d'X]gWigg]cb'k ]h\'h\Y'fYghcZh\Y'WUgg'VUgYX'cb'h\Y'dUdYfg dfYgYbhYX'UbX'h\Y'h\Ya Yg'UbX'ei Ygh]cbg'fU]gYX"

BchY. 'dUbY`g`k]```i gi U``mhU\_Y`d`UWY`]b`h\Y`gYWbX`\ci fžgc`h\YfY`k]``h]a Y`Xi f]b[`h\Y`VfYU\_'VYhk YYb`h\Y ZfghUbX`gYWbX`\ci f`hc`gYhi d`h\Y`dUbY``UbX`Zcf`h\Y`dUbY``]ghg`hc`\Uj Y`U`W\Uhk]h\`YUW\`ch\Yf"

Gi Va ]gg]cb bchYg. GYbX mci f'h hcf'mci f'dck Yfdc]bhVm- Ua 'cZh\Y XUmcZmci f'h hcf]U'"

A UfVX		WUggYg'UbX'mci 'UfY'YbWci fU[YX'hc'ghUfhimci f fYgYUfW.'YggUm'
K YY_'+.'&- 'A UfW\'!'& 5df]`	@YWn fY	

## F Ygci fWyg

### DfYgWf]VYX F Ygci fWYg

5b YggUm[i]XY k]``VY dfcj]XYX cb A ccXYžk]h\ gi[[YghYX fYUX]b[g Zcf gdYWZWYggUmei Ygh]cbg"

91 h/bg]j Y i gY k ]``VY a UXY cZ@Y[Ubhc'!']bWi X]b[ fYUX]b[g'UbX gci fWig'Zcf'h\Y YggUm'

### FYWca a YbXYX FYgci fW/g

+b 'H' fa g'cZfYgci fW'gž'='\][\`mfYWca a YbX'H\Y'Ua Un]b['bYk 'Fci hYX[Y'<]ghcfmcZ: Ya ]b]ga XUHU'VUgY Uj U]'UV'Y'j ]U'H\Y'@]VfUfmWUHU`c[i Y'fl]b\_'cZ@Y[UbhcŁ'-']hWcbHJ]bg'df]a UfmUbX'gYWcbXUfmgci fW'g gdUbb]b['H\Y'[`cVYž'ci f'k \c'Y'f]a Y'dYf]cX"

#### .

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

H\Y`fYj Ua dYX`j Yfg]cb`cZh\]g`Wci fgY`k Ug`Z|fghiHJi [\hVmNcfU`]b`&\$%+`UbX`g]bWY`h\Yb`g\Y`\Ug`HJ\_Yb`WUfY hc`fYgdcbX`hc`gi [[Ygh]cbg`a UXY`Zfca `ZYYXVUW\_`fYWY]j YX`]b`&\$%+#&\$% #&\$% `#&\$&\$`j ]U`A m9I dYf]YbW/#Ya U]`#WUgg`X]gW gg]cb`!`h\YgY`]bWi XY`gYh]b[`YggUmei Ygh]cbg`cb`XYWc`cb]g]b[`ZYa]b]ga `UbX`h\Y`I B

## Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

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

Image: Ybwei bhyfu'dfcv'ya k \yb'uhhya dhjb[ 'hc'gi va ]hmci f'Ugg][ ba Ybhh\fci [ \ 'Hi fb]h]bž'd'YUgY

Hy'Yd\cby'9| hy'fbu''Gi ddcfhcb'-', ) '' ' ' %cf'Ya U]''h\Ya 'cb'Y! hy'fbu'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'mYUft'''=Z'mci
UfY'i bUV'Y'hc'gi va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi 'hk ]h\ 'Hi fb]h]b'mci 'a Um'Udd'mZcf'Ub'Y! hy'bg]cbž'Vi hmci
a i ghfYhJ]b'mci f'h]W\_Yhbi a VYf'Zfca '9! hy'fbU''Gi ddcfhfU'cb[ 'k ]h\ 'Ubmch\Yf'fy'Yj UbhXcW a Ybhgt'hc
]bWi XY'Ug'Yj ]XYbW' hc'gi ddcfhmci f'Y! hy'bg]cb'Udd']WUh]cb"'=Zmci 'Ya U]''9! hy'fbU''Gi ddcfhmci 'k ]'`
Ui hca Uh]WJ'`mfYW']j Y'U'h]W\_Yhbi a VYfZ'Vi h]Zmci 'hY'Yd\cbY'mci 'k ]``bYYX'hc'gdYW]Z]WJ'`mUg\_'Zcf'cbY''
Hi fb]h]b'U'gc'dfcj ]XYg'i dXUhy'g'cb'h\Y]f'gmghYa 'ghUh' g'cb'Hk]hyf''

; YbYfU`mž'UggYgga YbhiHug\_g'a i ghVY'gi Va ]hhYX'Y`YVWfcb]\WJ``mij ]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ ba Ybh''=b']bgHJb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk ]```VY'gHJhYX'cb'mci f'\\circ i fgY'g'A ccX`Y'g]hY'k ]h\U`hYfbUh]j Y'gi Va ]gg]cb'XYHJ]`g"

cfi]bZcfa Uhjcbicbi\ckihcigi Va ]hUgg][ ba Ybhgicbi]bYij ]UiA ccXiY.i\hdg.#gh XYbhi bgk "YXi "Ui #\ck! gi Va ]hUgg][ ba Ybha ccXiY

## 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 bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]`]h]Yg'Ug'U'ghi XYbh'Uhi BGK VY'Uk UfY'cZd`U[]Uf]ga ž'Wcdmf][\hž'I BGK 'Ghi XYbh'7cXY'cZ7cbXi Wh'UbX'5VWWdhUV`Y'I gY'cZ IBGK =7 H°F Ygci fW/g°Dc`]Wm