ARTS1240

9bj]fcba YbhUbX˙GcW]Ym

HYfa ˙C bY˙˙##˙˙&$%‰

7ci fgY˙Cj Yfj]Yk

˙GHUZZ˙7cbHUWh˙8YHU]`g˙

˙7cbj Ybcfg˙

BUaY	9aU]`	5j U]`UV]`hm	@cWUh]cb	D\cbY
AUf]˙i ˙AY`c	aUf]˙i "aY`c4 i bgk "YXi "Ui	KYXbYgXUm˙%%Ua ˙!˙%&da	Acfj Yb˙6fck b˙'˙*˙%	-˙',)˙&-+$

˙Hi hcfg˙

BUaY	9aU]`	5j U]`UV]`hm	@cWUh]cb	D\cbY
Hca ˙K]W_Yfh	h˙k]W_Yfh4 i bgk "YXi "Ui			
AUXXmA]`Yf	aUXY`Y]bY"a ]`Yf4 i bgk "YXi "Ui			
GUa ˙K]X]b	g"k]X]b4 i bgk "YXi "Ui			

GWXcc`˙7cbHUWh˙=bZcfa Uh]cb

GWXcc`˙cZ˙< i a Ub]h]Yg˙UbX˙@Ub[i U[Yg

@cWUh]cb˙˙GWXcc`˙CZ]WY˙A cfj Yb˙6fck b˙6i ]`X]b[˙ž˙@Yj Y`˙&˙ž˙),

CdYb]b[˙< ci fg˙˙A cbXUm˙!˙: f]XUm˙ž˙-Ua ˙!˙) da

D\cbY˙˙ž˙*˙%&˙-',)˙%*, %

: Ul ˙˙ž˙*˙%&˙-',)˙', +$)

9aU]`˙˙\U˙4 i bgk "YXi "Ui

7ci fgY 8YhU]`g

7fYX]h Dc]bhg ¨*¨

Gi a a Ufm cZ h\Y 7ci fgY

Gi V¨YWh 5fYU¨ ¨7`h[da`_ WfS^: g_S`[f\W\

9bj]fcba YbhU`¨<i a Ub]h]Yg ˘cWgYg cb XYjY`cd]b[¨Wf]h]WU`]bg][\h ]bhc h\Y ¨\i a Ub X]a Ybg]cbg¨ cZ Ybj]fcba YbhU¨]ggi Ygž]ggi Yg h\Uh bck ¨dYfa YUhY¨U`a cghYj YfmUgdYWh cZ ci f¨]j Ygž ʒca ¨Yj Yfm XUm¨]ZYghmìY XYW]g]cbg hc Wc` `YWh]j Y UbX ¨di V¨]WWˌc]Wg ¨WcbWfb]b[¨i fVUb XYjY`cda YbhžYbYf[mgYW¨f]mUbX ʒccX dfcXi Wh]cb" H\]g Wci fgY k]``]bhfcXi WW¨mci ¨hc\ck ¨i bXYfm]b[ ¨W¨h fUžYW¨cbca ]WžUbX dc`]h]WU`¨gmgh\a g g\UdY¨Ybj]fcba Ybhg" K Y¨k``k cf_¨hfci [\¨YUa d¨Yg cZ\ck ¨h\Y¨d¨UWg k \YfY¨Y `]YžUbX h\Y¨dYcd¨Y k Y¨`]j Y¨k]h\žUfY¨g\UdYX¨UbX¨bZi Ybj¨fc`mWca dYh]b[¨]bhYfYghg ž gcW-U`¨UbX gdUh]U`¨ghfi Wh¨fYgžUbX¨ch\Yf¨`]j]b[¨WfYUh fYg" H\Y¨fYbj]fcba Ybhfi]g¨bch¨↑g\U¨VUW_Xfcd ʒcf¨\i a Ub¨UW\]j mm—h]g¨UW\]j Y¨ma UXY¨Vm XmbUa]WU[¨Ybhg¨k]h¨g¨hi UhYX¨k Umg¨cZgYY]b[¨h\Y¨k cf¨X¨"K Y¨k]``dfYgYbh¨mci¨k ]h¨h\Y¨cddcfhi b]bh]mhc¨h\¨b_ X]ZZYfYbh¨mUbX¨Wf]h]WU`¨mmUVci h¨`j]b[¨]b¨h\Y¨5bh\fcdcWYbY—h\Y¨YfU¨k \Yb¨\i a Ub¨YbhYfdf]gYg¨UbX¨UWh]j]hYg [ YbYfUhY¨`¨cVU!gWU`Y¨WXUb[Y¨k ]h¨`WU``¨a dUWhg"¨Mci ¨k]¨`VY¨]bhfcXi WYX¨hc¨Yl dYfhg¨k \cfYdfYgYbh¨h\Y X]j Yfg]hmcZ\Y¨]bhYfX]gW]d`]bUfm]Y¨Xg cZ 9bj]fcba YbhU`¨<i a Ub]h]Ygž]bW`i X]b[¨Ubh\fcdc`c[ mž\i a Ub [ Yc[ fUd\mž¨bY¨Ufhggž]d\]cgcd\mž\]ghcfmžUbX¨gW]YbWY¨UbX¨YWc`c[mghi X]Yg"¨9bj]fcba Ybh¨UbX¨GcW]Yhm]g¨h\Y¨[UhYk Umhc¨h\Y¨9bj]fcba YbhU`¨<i a Ub]h]Yg¨a U°cf¨UbX¨a ]bcf¨UbX¨Wb¨U`gc¨VY¨hU_Yb¨Ug¨Ub¨Y`YWh]j Y"

7ci fgY @YUfb]b[¨Ci hWca Yg

%" ꓱXYbh]ʒmžUbU`mgY¨UbX¨Yl d`U]b¨h\Y¨fUb[Y¨cZYbj]fcba YbhU`¨dfcV`Ya g¨ʒUWYX¨Vm¨Wcbh¨ma dcfUfm¨df)Ufm gcW]Yhm¨

&" 7f]h]WU`¨mb]bhYffc[ UhY¨h\Y¨fY`Uh]cbg\]d¨VYhk YYb¨\i a Ub¨Wca a i b]h]Yg¨UbX¨h\Y¨k]XYf¨Ybj]fcba Ybhg h\Ym]b¨\UVžXfUk]b¨cb¨h\Y¨]bg][\hg¨cZa i ¨]d`Y¨X]gW]d`bYg"¨¨

' " ꓳb]h]UhY¨]bXYdYbXYbh¨fYgYUfW\žk]h¨XYa cbghfUhYX¨UV]`]bmhc¨UggYa V`Yžgmbh\Yg]gY¨UbX

5ggYgga Ybh

5ggYgga Ybh HUg_g

5ggYgga Ybh HUg_	K Y][\h	8i Y 8UhY	Gh XYbh @Ufb]b[Ci hWca Yg 5ggYggYX
9ggUm	($ı	%%#$' #&$%- '$(.$$'DA	&ź ź(
; fci d DfYgYbhUh]cb	&$ı	K YY g '+'UbX ´,	%ź ź(
HU_Y \ca Y YI Ua	($ı	$%#$) #&$%- '$(.$$'DA	%ź&ź ź(

5ggYgga Ybh 8YHU]`g

5ggYgga Ybh % 9ggUm

GhUfh XUhY. Bch 5dd]WU'V`Y

@Yb[h]. &$$$ k cfXg

8YHU]`g. 2$$$ k cfXg" Mci UfY fYei]fYX hc Wca d YhY cbY YggUm Zfca hk c cdh]cbg" K f]hhYb ZYYXVUW_ k]`` dfcj]XYX j]U Hi fb]h]b k]h h Y i gY cZ Ua Uf_]b[fi Vf]W

Hi fb]h]b g Yhh]b[. H\]g Ugg][ma Ybh]g gi Va]hhYX hc fci [Hi fb]h]b UbX gh XYbhg Xc bch gYY Hi fb]h]b g]a]Uf]hm fYdcfhg"

5ggYgga Ybh &. ; fci d DfYgYbhUh]cb

GhUfh XUhY. Bch 5dd]WU'V`Y

@Yb[h]. %) a]bi hYg

8YHU]`g. b[fci dg gh XYbhg k]`` XYg][ b UbX dfYgYbhU VfYUhjY ]bhYfjYbh]cb ]bhc Ub Ybj ]fcba YbhU ]ggi Y"K f]hhYb ZYYXVUW_ k ]`` VY dfcj]XYX]b]bY k]h h Y UggYgga Ybh fi Vf]W" C fU dYYf ZYYXVUW_ k]`` U gc VY i bXYfhU_Yb"

Hi fb]h]b g Yhh]b[. H\]g g bchU Hi fb]h]b Ugg][ma Ybh

5ggYgga Ybh ' . HU_Y \ca Y YI Ua

GhUfh XUhY. Bch 5dd]WU'V`Y

@Yb[h]. %* $$

8YHU]`g. Gh XYbhg k]`` bYYX hc Ubgk Yf ( ci hcZ, dfYgYbhYX ei Ygh]cbg fY UhYX hc YWhi fY UbX h hcfU WcbhYbh 9UWX g \cfh YggUm Ubgk Yf WUb VY i d hc ($$ k cfXg"K f]hhYb ZYYXVUW_ k ]`` dfcj]XYX j]U Hi fb]h]b k]h h Y i gY cZ Ua Uf_]b[fi Vf]W

Hi fb]h]b g Yhh]b[. H\]g Ugg][ma Ybh]g gi Va]hhYX hc fci [Hi fb]h]b UbX gh XYbhg Xc bch gYY Hi fb]h]b g]a]Uf]hm fYdcfhg"

5hhYbXUbWY`FYei]fYaYbhg

5hhYbXUbWY`cZ`@YWhifYg`UbX`Hihcf]U`g`]g`aUbXUhcfm`]b`h\]g`WcifgY"``IbYei]gYdX`UVgYbWY`Zfca`acfY`h\Ub &\$ı``cZ`YWhifYg`UbX`hihcf]U`g`k]``fYgi`h`]b`h\Y`Uk`UfX`cZ`U`ZU]`[fUXY"

±b`YWhifYg`mci`k]`UWW]jY`mYb`U[Y`k]h\`WcfY`Wcifg`WcbhYbhžYbUV]b[`mci`hc`UhhU]]b`7@C`%"`±b hihcf]U`g`mci`k]`UWW]jY`mYb`U[Y`k]h\`WcfY`Wcifg`WcbhYbhžYbUV]b[`mci`hc`UhhU]]b`7@C`%`UbX`7@C`&"

7cifgY`GWXYXi`Y

H]aYhUV`Y`

8UhY	HmdY	7cbhYbh
KYY_`%`%`,`:YVfiUfm!`&(`:YVfiUfm	@YWhifY	±bhfcXiWh]cb`#K\Uh]g`bUhifY3`
KYY_`&`&)`:YVfiUfm!`"`AUfW\	@YWhifY	9bj]fcbaYbhU`d\]`cgcd\mUbX`Yh\]Wg
KYY_`"`"(`AUfW\`!`%\$`AUfW\	@YWhifY	9bj]fcbaYbhU`<]ghcfm
KYY_`(`%%`AUfW\`!`%+`AUfW\	@YWhifY	9bj]fcbaYbhU`5bh\fcdc`c[m
KYY_`)`%`AUfW\`!`&(`AUfW\	@YWhifY	9bj]fcbaYbhU`;Yc[fUd\m
KYY_`*`&)`AUfW\`!`"`%`AUfW\	@YWhifY	9bj]fcbaYbhU`>i`gh]WY
KYY_`+`%`5df]`!`+`5df]`	@YWhifY	9bj]fcbaYbhU`ifVUb]ga`
KYY_`,`,`5df]`!`%(`5df]`	@YWhifY	7`]aUhY`7\Ub[Y`#GW]YbWY`UbX`HYW\bc`c[m`Ghi X]Yg`fGHGŁ
KYY_`-`%)`5df]`!`&%`5df]`	@YWhifY	9bj]fcbaYbhU`<iaUb]h]Yg`#7cbWi g]cbg Bc`hihcf]U`g`h\]g`k YY_`XiY`hc`:f]XUmUi `c`]XUm f]bghYUXžKYY_`%\$`YWhifY`k]`VY`i gYX`Zcf`Z]bU` UggYgga YbhE/5Ł"
KYY_`%\$`&&`5df]`!`&,`5df]`	@YWhifY	5`E/5`gYgg]cb`Zcf`Z]bU`Ugg][ba Ybh`k]`cWWif Xif]b[`h\Y`@YWhifY`h]aY`g`ch' Bc`hihcf]U`g`h\]g`k YY_`XiY`hc`h\Y`5BN57`di V]W \c`]XUm'

F Ygci fWYg

DfYgWf]VYX F Ygci fWYg

±Z cfa Uh]cb Uj U]`UV`Y cb A ccX`Y

F YWca a YbXYX F Ygci fWYg

±Z cfa Uh]cb Uj U]`UV`Y cb A ccX`Y

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

7 ci fgYg UfY dYf]cX]WU``m fYj]Yk YX UbX gh XYbhg' ZYYXVUW_]g i gYX hc]a dfcj Y h Ya "

: YYXVUW_]g [Uh YfYX Zfca gh XYbhg i g]b[a m9 I dYf]YbWY"]g YbWci fU[YX gh XYbhg Wca d`YhY h Y]f

Gi Va]gg]cb cZ 5ggYgga Ybh HUg_g

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

Zmci YbWci bh Yf U dfcV Ya k \Yb Uh Ya dh]b[hc gi Va]hmci f Ugg][ba Ybh \fci [\ Hi fb]h]bž d`YUgY hY Yd\cbY 9l hYfbU Gi ddcfh cb -' , ) '' ' ' %cf Ya U]`h Ya cb Yl hYfbU hY gi ddcfh4 i bgk "YX i "Ui "" Gi ddcfh \ci fg UfY ', .$$Ua – %$.$$da cb k YY_XUmg UbX –.$$Ua –) .$$da cb k YY_YbXg f1 *) XUmg U mYUfŁ" Zmci UfY i bUV Y hc gi Va]hmci f Ugg][ba Ybh XiY hc U Zi hk]h\ Hi fb]h]b mci a UmUdd mZcf Ub Yl hYbg]cbž Vi hmci a igh fYU U]b mci f W Yh hbi a VYf Zca 9l hYfbU Gi ddcfhf U cb[k]h\ Ubmch\Yf fY Yj Ubh XcWa Ybhg Łhc]bWi XY Ug Yj]XYbWY hc gi ddcfhmci f Yl hYbg]cb Udd `W h]cb" Zmci Ya U]` 9l hYfbU Gi ddcfhmci k]`

5WUXYa]W< cbYghm UbX D`U[ ]Uf]ga

D`U[ ]Uf]ga ]g i g]b[ h\Y k cfXg cf ]XYUg cZ ch\Yfg UbX dfYgYbh ]b[ h\Ya Ug mci f ck b" ‡h WUb h]_Y a Ubm Zcfa gž Zfca `XY`VYfUhY `WXYUh]b[h c `UWW]XYbhU`mW cdm]b[Zfca U gci fWY k]h\ ci h UW_bck `YX[Ya YbhŸ

I BGK `[ fci dg`d`U[ ]Uf]ga]bhc h\Y Zc``ck]b[WUhY[cf]Yg.

7 cdm]b[ž i g]b[h\Y gUa Y cf jYfmg]a]`Uf k cfXg hc h\Y cf][ ]bU` h\Yl hcf]XYU` k ]h\ci h UW_bck `YX[ ]b[h\Y

- i bXYfghUbX`mci f`f][\hg`UbX`fYgdcbg]V]`]hYg`Ug`U`ghXYbh`Uhl BGK

- VY`Uk UfY`cZd`U[ ]Uf]ga žWcdmf][ \hž`l BGK `Ghi XYbh`7cXY`cZ7cbXi WhiUbX`5WWWdhUV`Y`l gY`cZ l BGK `=7H`F Ygci fWYg`Dc`]Wn

- VY`Uk UfY`cZh\Y`ghUbXUfXg`cZVY\Uj]ci f`Yl dYVWYX`cZYj Yfmcb Y`]b`h\Y`l BGK `Wca a i b]hm

- `cWWUhY`gYfj]WYg`UbX`]bZcfa Uh]cb`UVci h`l BGK `UbX`l BGK `@]VfUfm

Gca Y`cZh\YgY`UfYUg`k]``VY`ZUa ]]Uf`hc`mci žch\Yfg`k ]``VY`bYk "; U]b]b[ `U`gc`]X`i bXYfghUbX]b[ `cZU``h\Y fY`UhYX`UgdYWhg`cZ9@G9`k ]``\Y`d`mci `a U_Y`h\Y`a cgh`cZmci f`ghiXYg`Uhl BGK "`
\htd.##gi VYWi]XYg``VfUfm!i bgk "YXi "Ui #`]gY#UVci h\Y`]gY

5WUXYa]W $\pm$bŽcfa Uh]cb

: cf˙YggYbh]U˙ghi XYbh˙]bŽcfa Uh]cb˙fY˙Uh]b[˙hc.

- fYei Yghg˙Žcf˙Yl hYbg]cb/
- `UhY˙gi Va ]gg]cbg˙[ i ]XY`]bYg/
- fYj]Yk ˙cŽa Uf_g/
- I BGK ˙<YU`h\˙UbX˙GUŽYhm˙dc`]W]Yg/
- Yl Ua]bUh]cb˙dfcWYXi fYg/
- gdYW]U`˙Wcbg]XYfUh]cb˙]b˙h\Y˙Yj Ybh˙cŽ]`bYgg˙cf˙a]gUXj Ybhi fY/
- ghi XYbh˙Yei]hm˙UbX˙X]gUV]`]hm/
- UbX˙ch\Yf˙YggYbh]U`˙UWUXYa]W $\pm$bŽcfa Uh]cbŽgYY

\\hhdg.##k k k "Ufhg"i bgk "YXi "Ui #W ffYbh\ghi XYbhg#UWUXYa]W $\pm$bŽcfa Uh]cb#dfchcVc`g![ i ]XY`]bYg#

$\Rightarrow$a U[Y˙7 fYX]h

H\]g˙]g˙U I BGK ˙ck bYX˙]a U[Y

7 F $\Rightarrow$7 C G

7 F $\Rightarrow$7 C G ˙Dfcj]XYf˙7 cXY. ˙$$$-, ;