ARTS3453

DfcZŸgg]cbU`'7\]bYgY'6

GŸa Ygh‸Ÿf‛Hk c‛'##‛'&$%⸗

7ci fgY Cj Yfj]Yk

GHUZZ 7cbHUWh 8YHU] g

7cbj Ybcfg

BUa Y	9a U]	5j U] UV] m	@cWUh cb	D\cbY
M] N\Yb[	m]"n\Yb[' 4 i bgk "YXi "Ui	Hi YgXUmg '%' $!&.' $ da 'cf Vm Uddc]bha Ybh	F &)' A cfj Yb 6fck b 6i]X]b[	-' ,) '%+' $

@YWi fYfg

BUa Y	9a U]	5j U] UV] m	@cWUh cb	D\cbY
M] N\Yb[	m]"n\Yb[' 4 i bgk "YXi "Ui	Hi YgXUmg '%' $!&.' $ da 'cf Vm Uddc]bha Ybh	F &)' A cfj Yb 6fck b 6i]X]b[	-' ,) '%+' $

Hi hcfg

BUa Y	9a U]	5j U] UV] m	@cWUh cb	D\cbY
M]b[ ] Gi b	m]b[ ]"gi b 4 i bgk "YXi "Ui	H67	F &%% A cfj Yb 6fck b 6i]X]b[	-' ,) '$(-'

GWXcc` 7cbHUWh]bZcfa Uh]cb

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

@cWUh]cb. GWXcc` cZ JWYž A cfj Yb 6fck b 6i ]X]b[ ž @Yj Y` &ž &)

C dYb]b['< ci fg. A cbXUm! ': f]XUmž -Ua '! ') da

D\cbY. Ž*%&'-,)'%*, %

: Ul . Ž*%&'-,)', +$)

9a U] .

5 ˙7 ci fgY˙5i ħ\cf]ħm˙a Um˙YI W˙gY˙U˙għi XYbħˌfca ˙W˙UggYg˙cf˙UWˌjˌjˌhˌYg˙ˌcf˙i d˙hc˙cbY˙a cbħ\˙"˙<ck Yj Yfžˌħ\Ym
a Um˙Ugg][b˙UXXˌħcbU˙UbX#cf˙U˙ħ\YfbUˌħj Y˙ħUg_g˙hc˙Ybgi fY˙W˙a d˙]UbW˙"˙5˙7 ci fgY˙5i ħ\cf]ħm˙W˙cbg]XYf]b[˙ħ\Y
[fUbħ]b[˙cZ˙UVgYbW˙a i gh˙VY˙gUħ]gZˌYX˙U˙għi XYb˙k]˙˙għ˙`˙VY˙UV˙Y˙hc˙a YYh˙ħ\Y˙W˙ci fgY'˙g˙˙YUfb]b[˙ci hW˙a Yg
UbX#cf˙jc˙i a Y˙cZ˙YUfb]b[˙"˙5˙għi XYbˌgYY˙_]b[˙Uddfcj U˙hc˙VY˙UVgYbħ˙ˌcf˙a cfY˙ħ\Ub˙cbY˙a cbħ\˙a i gh˙Udd˙m
]b˙k f]ħ]b[˙hc˙ħ\Y˙8 YUb˙UbX˙dfcj]XY˙U˙`cf][ ]bU˙cf˙W˙fħ]ˌYX˙gi ddcfħ]b[˙XcW˙a YbħUħDcb˙"

: cf˙a cfY˙]bˌcfa Uħ]cb˙UVci ħ˙ħ\Y˙Uħħ\YbXUbW˙dfchcW˙g˙]b˙ħ\Y˙: UW˙hm˙cZ˙5 fħg˙UbX˙GcW˙U˙
GW˙YbW˙g.˙[\ħdg.##k k k ˙Ufħg˙i bgk ˙YXi ˙Ui #\VˌffYbħ\għi XYbħg#UWUXYa]W˙]bˌcfa Uħ]cb#dfchcW˙g![i]XY˙]bYg#](underlined link)

5 WUXYa]W˙]bˌcfa Uħ]cb˙

: cf˙YggYbħ]U˙għi XYbħ˙]bˌcfa Uħ]cb˙fY˙Uħ]b[˙hc.˙fYei Ygħg˙ˌcf˙YI hˌYbg]cb/fYj]Yk ˙cZ˙a Uf_g/cWW˙dUħ]cbU˙˙\YU˙ħ\
UbX˙gUˌYhm/YI Ua]bUħ]cb˙dfcW˙XifYg/gdYW˙U˙˙Wcbg]XYfUh]cb˙]b˙ħ\Y˙Yj Ybħ˙cZ˙]˙bYgg˙cf˙a]gUXj YbħifY/
għi XYbħ˙Yei]hm˙UbX˙X]gUV]˙]hm/UbX˙cħ\Yf˙YggYbħ]U˙UWUXYa]W˙]bˌcfa Uħ]cbž
gYY˙[\ħdg.##k k k ˙Ufħg˙i bgk ˙YXi ˙Ui #\VˌffYbħ\għi XYbħg#UWUXYa]W˙]bˌcfa Uħ]cb#dfchcW˙g![i]XY˙]bYg#(underlined link)

7ci fgY 8YhU]`g

7fYX]h Dc]bhg ·*·

Gi a a UfmcZ h\Y 7ci fgY

Gi V YWh 5fYU. 5[` WeWE fgV[We

H\]g Wci fgY dfcj]XYg U dfcZYgg]cbU` `YjY` dfc[fUa ]b 7\]bYgY Ub[ iU[Y UbX Wi`hi fY ghiX]Yg ‡+]g

5ggYgga Ybh

5ggYgga Ybh HUg_g

5ggYgga Ybh HUg_	K Y][\h	8i Y 8UhY	Gh XYbh @YUfb]b[Ci hWca Yg 5ggYggYX
+b!WUgg hYghg	' $ı	k YY_ '+/k YY_ '%	%ž ž(
C b`]bY E i]n	&$ı	K YY_ '' ž) ž+ž- ž%%	%ž
6`c[	&$ı	6]!k YY_ `m	%ž&ž ž(
; fci d F YgYUfWX Dfc YWh	' $ı	k YY_ '%&	

Gi Va]gg]cb cZ 5ggYgga Ybh HUg_g

Ghi XYbhg UfY Yl dYWHYX hc di h h\Y]f bUa Yg UbX ghi XYbhbi a VYfg cb Yj YfmidU[Y cZ h\Y]f Ugg][ba Ybhg"

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

=Zmci YbVci bhYf U dfcV`Ya k \Yb UhhYa dh]b[ hc gi Va ]hmci f Ugg][ ba Ybh h\fci [ \ Hi fb]h]b bž d`YUgY hY`Yd\cbY 9I h\YfbU`Gi ddcfh cb -' ,)'' ' %cf Ya U]`h\Ya cb Yl h\YfbU`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 f1 *) XUmg U mYUfŁ" =Zmci UfY i bUV`Y hc gi Va]hmci f Ugg][ba Ybh Xi Y hc U ZUi `hk ]h\ Hi fb]h]b mci a UmUdd`m Zcf Ub Yl hYbg]cbž Vi hmci a i ghfYHU]b mci f]h]W YYbh a VYf Zca '9l h\YfbU`Gi ddcfhfU cb[ k ]h\ Ubmci h\Yf fYY`Yj Ubh XcW a Ybhg Łhc]bW XY Ug Yj]XYbVY hc gi ddcfhmci f Yl hYbg]cb Udd`]WUh]cb" =Zmci Ya U]`9l h\YfbU`Gi ddcfhmci k ]` Ui hca Uh]WU`mfYWY]j Y U]h\YWhi a VYrž Vi h]Zmci Yd\cbY mci k]``bYYX hc gdYW]ZWU`mUg_ Zcr cbY" Hi fb]h]b U `gc dfcj]XYg i dXUhYg cb h\Y]f gmghYa `ghUhi g cb Hk]hhYr"

; YbYfU `mž UggYgga Ybh HUg_g a i ghVY gi Va ]hhYX Y`YWffcb]WU`mj ]U h\Yr Hi fb]h]b cr U A ccX`Y Ugg][ba Ybh "±b]bghUbWg k \YfY h\]g]g bch dcgg]V`Yž h]k]`` VY ghUhYX cb mci r Wci fgY'g A ccX`Y g]hY k ]h\ U `hYfbUh]j Y gi Va]gg]cb XYHU]`g"

@UhY 5ggYgga Ybh DYbU`h]Yg

Ghi XYbhg UfY fYgdcbg]V`Y Zcr h\Y gi Va ]gg]cb cZ UggYgga Ybh HUg_g Vm h\Y fYei ]fYX XUhYg UbX h]a Yg" 8YdYbX]b[ cZ h\Y Yl hYbhcZXY`Um]b h\Y gi Va]gg]cb cZ Ub UggYgga Ybh HUg_ dUghh\Y Xi Y XUhY UbX h]a Yž

- K cf_ gi Va]hhYX %$ hc % XUmg UZhYf h Y gh]di `UhYX XYUX`]bY k]``VY UggYggYX UbX ZYYXVUW_ dfcj]XYX Vi hU a Uf_cZnYfc k ]``VY fYWcfXYX" Zh Y k cf_ k ci X`UjY fYW`]jYX U dUgg a Uf_Vi h Zcf h Y UhYbYgg UbX h Y k cf_ g U Wca di gcfm Wci fgY Wca dcbYbhf i fX Y fYei]fYa YbhŽ U gh XYbhk]` VY XYYa YX hc \UjY a Yhh UhfYei]fYa Ybh

- K cf_ gi Va]hhYX &$ cf a cfY XUmg UZhYf h Y gh]di `UhYX XYUX`]bY k]``bch VY UWWWdhYX Zcf UggYgga YbhUbX k ]``fYWWjY bc ZYYXVUW_ža Uf_cf [fUXY" Zh Y UggYgga Ybh Ug_]g U Wca di `cfm Wca dcbYbhcZh Y Wci fgY U gh XYbhk]``fYWWjY Ub I bgUh]gZUWcfm: U]``fI : Ł[fUXY Ug U fYgi `hcZ i bgUh]gZUWcfmdYfŽcfa UbWW`]b Ub YggYbhU`Wca dcbYbhcZh Y Wci fgY"

H\]g]bZ cfa Uh]cb]g U gc Uj U]`$ ‰ fm   ‰   ‰   ‰

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

D`U[]Uf]ga ]g ig]b[ h\Y kcfXg cf ]XYUg cZ ch\Yfg UbX dfYgYbh]b[ h\Ya Ug mcif ckb b"  +\Ub h\U_Y a Ubm Zcfa gž Zcb XY`VYfUhY W\YUh]b[ ]b h\c UWW]XYbhU`` mW dm]b[Zcba U gci fWY k]h\ci h UW_bck`YX[Ya Ybh"

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

7cdm]b[. ig]b[h\Y gUa Y cf jYfm g]a]Uf k cfXg hc h\Y cf][]bU` hYl hcf ]XYU k ]h\ci h UW_bck`YX[]b[h\Y gci fWY cf ig]b[ei chUh]cb a Uf_g" H\]g U`gc Udd`]Yg hc a U[Ygž UfhUbX XYg][b dfc YWh gž Ug k Y``Ug dfYgYbhUh]cbg k \YfY cbaY YcbY dfYgYbhg Ubch\Yf g]XYUg cf k cfXg k]h\ci hWfYX]h"

+bUddfcdf]UhY dUfUd\fUg]b[. W\Ub[]b[cbY cf a U žZY k cfXg UbX d\fUgYg k \]`Y a cgh]hfYhU]b]b[ h\Y cf][]bU` ghfi Wh\i fY UbX `b žcfa Uh]cb k ]h\ci h UW_bck`YX[Ya Ybh" H\]g U`gc Udd`]Yg]b dfYgYbhUh]cbg k \YfY gca YcbY dUfUd\fUgYg Ubch\Yf g]XYUg cf k cfXg k]h\ci hWfYX]h" +U`gc Udd`]Yg hc d]YW]b[hc[Yh\Yf ei chYg UbX dUfUd\fUgYg]bhc U bYk k \c`ž k ]h\ci hfYZYfYbW]b[ UbX U]gh XYbhg ck b UbU`mg]g hc`Vf]b h\Y a UhYf]U` hc[Yh\Yf"
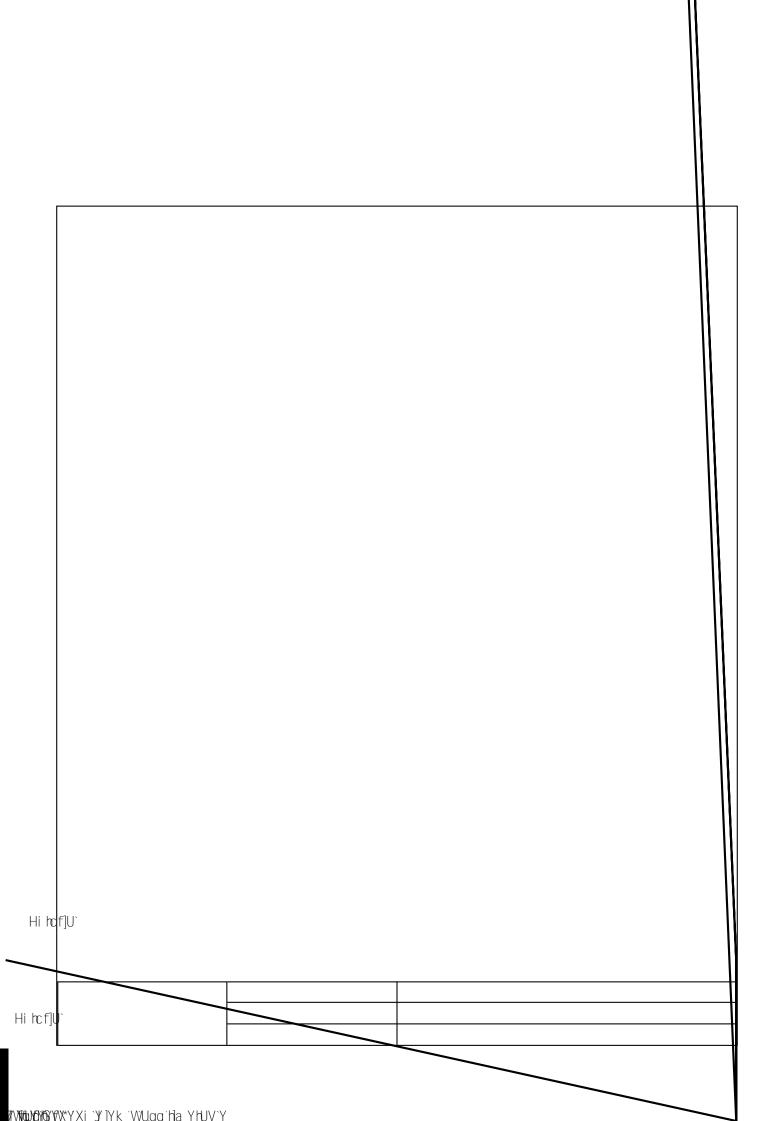
7c``ig]cb. k cf_]b[ k ]h\ ch\Yfg Vi h]dUgg]b[ cZ h\Y k cf_Ug U dfgcb’g ]bX ]j]Xi U` k cf_" 7c``ig]cb U`gc ]bWi XYg dfcj ]X]b[ mci f k cf_ hc Ubch\Yf ghi XYbhVY Zcf Y h\Y Xi Y XUhYž cf Zcf h\Y di fdcgY cZ h\Ya d`U[]Uf]g]b[. Uh Ubm h]aYž dUf]b[UbX h\Y dYfgcb hc dYfžcfa Ub UWUXYa]WhUg_ž ghU]`b[ U`b[cf UWži f]f]b[Ubch\Yf dYfgcb’g UWUXYa]Wk cf_ UbX Wcdm]b[ ]hž c Z Yf]b[hc Wca d`YhY UbUh\Yf dYfgcb’g k cf_ cf gYY_]b[ dUma Ybh Zcf Wca d`Yh]b[UWUXYa]Wk cf_"

+bUddfcdf]UhY W]hUh]cb. 7]h]b[gci fWYg k]h\ \Uj Y bchVYYb fYUXž k]h\ci h UW_bck`YX[ b h\Y ″gYWcbXUfm″ gci fWY Zfca k ]h\ _bck`YX[YcZ h\Ya \Ug VYYb cVhU]bYX"

8i d`]WUh]cb fžgYZd`U[]Uf]ga ″Ł gi Ym]hž hc mci f ckb b]k cf_ž]b k\`cY`cf]b dUfhžk \YfY]h\Ug dfYj]cig m YYb dfYdUfYX cf gi Va]hhYX Zcf Ubch\Yf UggYgga Ybhcf Wci fgY Uh I BGK cf Ubch\Yf]b]j Yfg]hm"

7cffYWh]fYZYfYbW]b[dfUWh]WYg.

- VYhhYf a UbU[Y mci f h]a Y

Hi hcf]U`

Hi hcf]U`

K YY_ '%&. '%) 'C WhcVYf ! &%'C WhcVYf	@YWhi fY	; fci d 'F YgYUfW 'Dfc YWhg . 'DfYdUfUh cbg
	Hi hcf]U`	; fci d 'F YgYUfW 'Dfc YWhg 'dfYgYbhUh cb 'UbX X]gW gg]cb
K YY_ '% . '&& 'C WhcVYf ! &, 'C WhcVYf	Hi hcf]U`	HYgh '&

F Ygci fWY/g

DfYgWf]VYX F Ygci fWY/g

HYI hVcc_ 8YHU]`g
5``fYUX]b[ a UhYf]U g k ]`` VY Uj U]UV Y Zcf Xck b cUX cb h\Y 7ci fgY A ccX Y"

F YWca a YbXYX F Ygci fWY/g

5XX]h]cbU F YUX]b[g
5XX]h]cbU F YUX]b[g WUb U gc VY Zci bX cb h\Y 7ci fgY A ccX Y"
K YVg]hYg

- F YZYfYbW]b[gmghYa g

  [\hhd.##k k k "W]bgk "YXi "Ui #cb]b]V #fYZ \ma `](\hhd.##k k k "W]bgk "YXi "Ui #cb]b]V #fYZ \ma `)

GmbYf[ ]Yg˙]b˙Gci bX˙&$%*˙

7 F ⫤7 C G

7 F ⫤7 C G˙Dfcj]XYf˙7 cXY.˙$$$-˙,˙¦