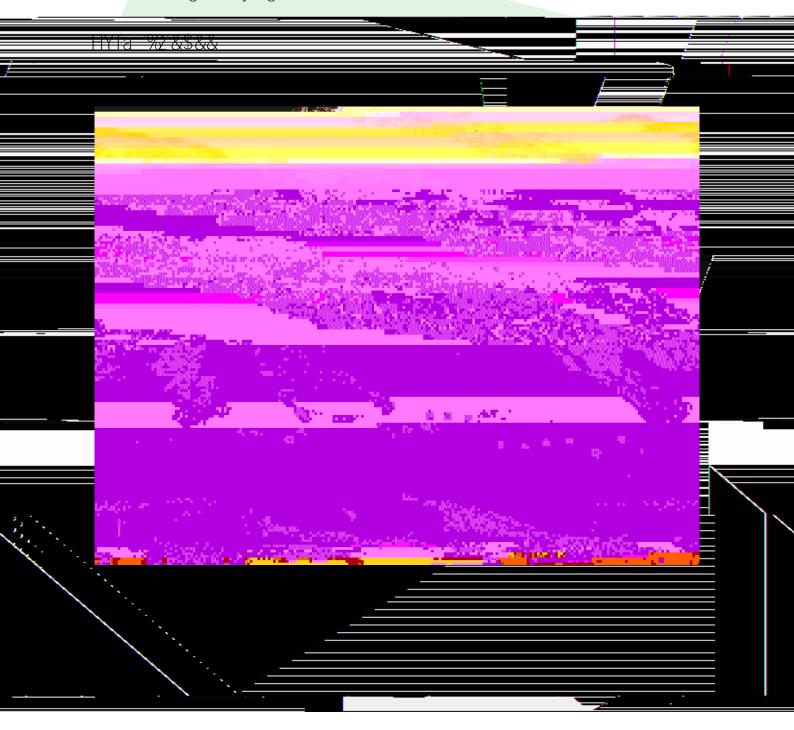


# **EDST1104**

GcWJU`DYfgdYWJjYg']b'9XiWUJcb



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

#### GHJZ7cbHJWh8YHJ]`g

#### 7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cWUh]cb	D\cbY
8Ybb]g'5`cbnc	X"U`cbnc4 i bgk "YXi "Ui	6mUddc]bha Ybh	; (%A cfj Yb 6fck b	

#### GWXcc``7cbHJWh'±bZcfa Uh]cb

GWkcc`cZ9Xi WUhjcb

5 fhgž8 Yg][ b UbX 5 fVX]hYWhi fY

; fci bX': `ccfž'A cfj Yb '6fck b '6i ]`X]b[ 'fl &\$Ł

H.  $^{'}$ Ž  $^{*}$  % f&Ł  $^{'}$  -  $^{'}$  , )  $^{'}$ %- ++

9. YXi WUhjcb4 i bgk "YXi "Ui

K. `\hdg.#kkk"Ufhg"i bgk"YXi "Ui #YXi WUhjcb

#### 5W\_bck `YX[ Ya YbhcZ7ci bhfm

I BGK '5frgž8Yg][b'UbX'5fW,]h'Wi fY'? Ybg]b[hcb'UbX'DUXX]b[hcb'Wa di gYg'UfY'Vi ]'hcb'5Vcf][]bU`@UbXg"K Y'dUmci f'fYgdYWrg'hc'h\Y'6]X'][U''UbX'; UX][U''dYcd'Yg'k\c'UfY'h\Y'7i ghcX]Ubg'cZh\YgY'`UbXg" K Y'UW\_bck 'YX[Y'h\Y'5Vcf][]bU`'UbX'HcffYg'GHfU]h=g`UbXYf'dYcd'Ygž'h\Y': ]fgh5i ghfU`]Ubgžk\cgY'`UbXgž k ]bXg'UbX'k UhYfg'k Y'U``'bck 'g\UfYž'UbX'dUmfYgdYWhc'h\Y]f'i b]ei Y'j U'i Ygž'UbX'h\Y]f'Wcbh]bi ]b['UbX'YbXi f]b['W'h fYg'k\]W 'XYYYdYb'UbX'Ybf]W 'h\Y'`]ZY'cZci f'bUh]cb'UbX'Wca a i b]h]Yg"''

 $\label{eq:continuous} \text{$\overset{\cdot\cdot}{=}$ U[Y'WciftYgmcZthY'CZthY'Dfc'J]WY!7\UbWY``cf'+bX][Ybcig']$ $$BGK_fig'+bX][Ybcig'ghfUhY[m]$ 

### 7ci fgY 8YHJ] g

#### $I b hg c Z 7 f Y X h^*$

#### K cf\_`cUX

%) \$`\ci fg`]bWi X]b[`WUgg`WcbHUWfi\ci fgž`fYUX]b[gž`WUgg`dfYdUfUh]cbž`UggYgga Ybhž`Zc``ck`i d`UWhjj]h]Ygž YhW

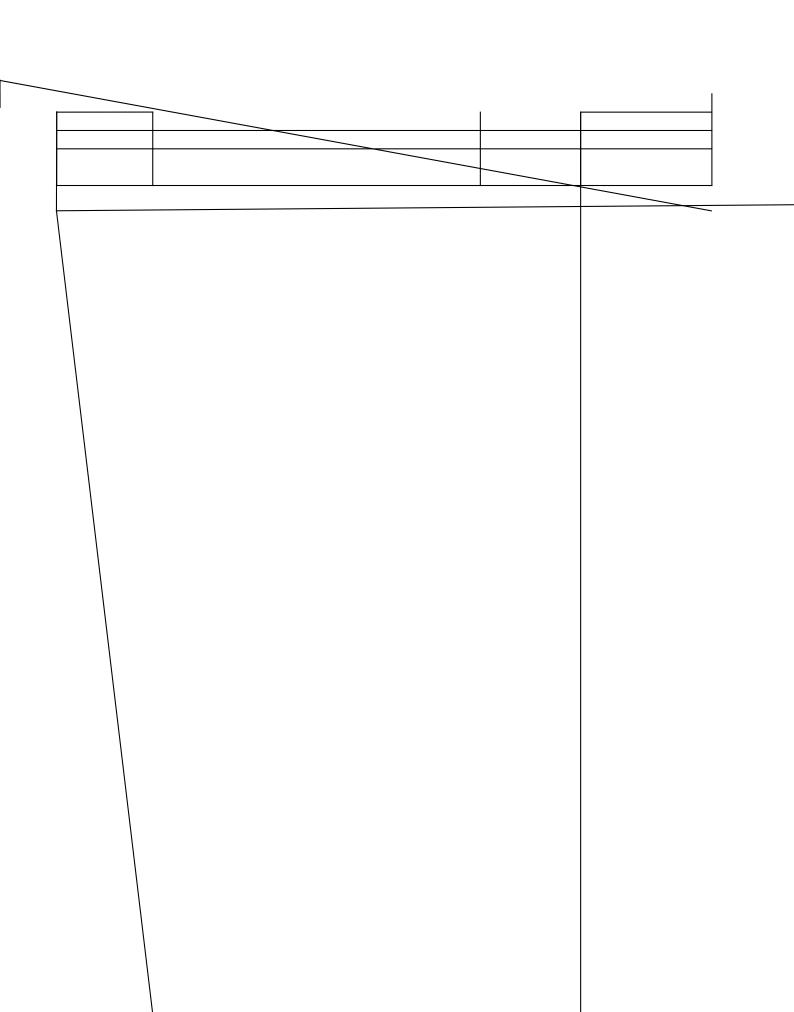
#### Giaa UfmcZh\Y 7ci fgY

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

- %" ⇒ XYbhjZmUbX`YI d`U]b`h\Y`fY`Uh]cbg\]dg`VYhk YYb`ZJa]`mVUW\_[fci bX`ZJWhcfg`gi W\`Ug`G9GžfUW\`UbX [YbXYf`UbX`h\Y`YXi WUh]cbU``ci hWca Yg`cZgW\cc``ghi XYbhg"
- &" 8 YgWf]VYžX]gW gg`UbX`UbU`mgY`l\Y`fY`Ulf\cbg\]dg`VYlk YYb`YXi WUlf\cbU``ci l\Xa Yg`cZgW\cc`qli XYbhq`UbX`l\Y`X]ZYfYbWfq`VYlk YYb`qV\\cc`q`UbX`k ]l\]b`qV\\cc`q"
- ' " 9I Ua ]bYžX]gW ggʻUbXʻYj U`i UhYʻYXi WUh]cbʻdc`]W]Ygʻgi WXʻUgʻh\cgYʻfY`Uh]b[ 'hc``ck!G9GžfUWYžUbX a i `h]W`hi fU`]ga "

#### 5 i glfU`]Ub DfcZYgg]cbU`GlUbXUfXg Zcf HYUWXYfg

GłUbXUfX		5ggYgga Ybh#g
%"%"%	8 Ya cbghfuhY`_bck`YX[Y`UbX`i bXYfghUbX]b[`cZd\mg]WU`žgcW]U`ž UbX`]bhY``YWh U``XYj Y`cda YbhUbX`W\UfUWhYf]gh]Wg`cZgh XYbhg`UbX \ck`h\YgY`a UmUZYWh`YUfb]b["	%Ž &
%"' "%	8 Ya cbglfUlY '_bck `YX[ Y`cZhYUW\]b[ `glfUlY[]Yg`h\UhUfY fYgdcbg]j Y`lc`h\Y``YUfb]b[ `glfYb[ h\g`UbX`bYYXg`cZghi XYbhg`Zfca X]j YfgY``]b[ i ]gh]WgžW`hi fU`žfY`][ ]ci gžUbX`gcW]cYWcbca ]W VUW_[ fci bXg"	% <del>.</del> &
%"( "%	8 Ya cbglffUhY VfcUX _bck `YX[Y 'UbX'i bXYfghUbX]b[ 'cZh\Y']a dUWh cZW `hi fYžW `hi fU`]XYbh]hmžUbX``]b[ i ]gh]WVUW[ fci bX'cb'h\Y YXi WUh]cb'cZghi XYbhg'Zfca '5Vcf][ ]bU`'UbX'HcffYg'GhfU]h'=g`UbXYf VUW_[ fci bXg"	&
%") "%	8 Ya cbghfuhY _bck `YX[Y'UbX'i bXYfghUbX]b[ 'cZghfUhY[ ]Yg'Zcf X]ZYfYbhJUhJb[ 'hYUW\]b[ 'hc'a YYhih\Y'gdYWJZJW'YUfb]b[ 'bYYXg'cZ ghi XYbhg'UWfcgg'h\Y'Z ```fUb[Y'cZUV]`]hJYg"	&
( "%"%	⇒XYbhJmghfUhY[]Yg'hc'gi ddcfh]bWi g]j Y'ghi XYbhdUfhJWjdUhJcb'UbX Yb[U[Ya Ybh]b'WUggfcca 'UWfj]hJYg"	&
+"&"%	I bXYfgrUbX'h\Y'fY`Yj Ubh`Y[]g`Ur\jYž'UXa]b]grfUr\jYž'UbX cf[Ub]nUr\jcbU``dc`]WjYg'UbX'dfcWYggYg'fYei]fYX'Zcf'rYUW\Yfg	&



# 5ggYgga Ybh

5ggYgga Ybh'hJg_	K Y][ \h		

p['th\Y'AmGW\cc``kYVg]hY'famgW\cc`"YXi"Uitž]XYbh]ZmiUbX'XYgWf]VY'cbY'gYWcbXUfmgW\cc``]b'BGK pfc`g'Uh`YUgh'%\$i 'cZghiXYbhg'Zfca'`Ub[iU[Y'VUW\_[fcibXg'ch\Yf'th\Ub'9b[`]g\'f@6CH9Ł"'H\Y'gW\cc` hVY'cbY'mci'UhhYbXYX'mcifgY`Zfhfmhc'W\ccgY'gcaYh\]b['th\UhgYYag'ei]hY'X]ZZYfYbhŁ"'±b'UXX]h]cbžh\Y `'aigh\UjY'CB9'cZh\Y'Zc``ck]b['W\UfUWhYf]gh]Wg.

- 6Y``cWJHYX`]b`Ub`]bbYf`fY[]cbU`žci HYf`fY[]cbU`žfYa cHY`cf'j YfmfYa cHY``cWJH]cb/CF
- < Uj Y 'Ub '=7 G95 'VY`ck '-) \$ 'cf'cj Yf'%\$) \$/'CF
- ˈ<**UjYʻUbʻYbfc`aYbhcZUh**(`Yubynnok; i%&Zghi)&YonnogʻZfca '5Vcfnogʻ]bU`'cf`HcffYgʻGhfU]hi⊕`nnoksYf VUW\_[fcibXg/CF

FI 6F = 7 # 998657? G < 99H 98GH‰\$( GC 7 = 5@D9FGD97 H = J 9G = B 98I 75 H € B

I BGK 'G7<CC@'C: '98I 75H€B

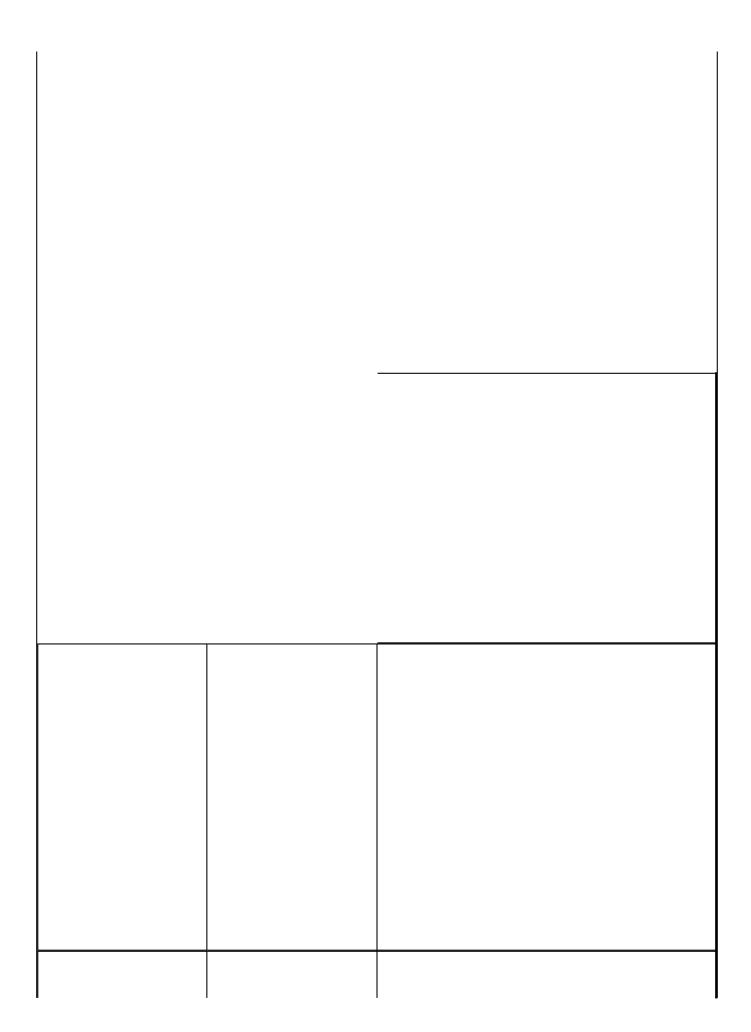
 $5\,ggYgga\ Ybh'HUg\_'\%\ 'DYfgcbU'`\ \]ghcfm$ 

GdYWJZJW7f]HYf]U	¨flŁ—	 	:	2fŽŁ
I bXYfghUbX]b[ 'cZh\Y'ei Ygh]cb'cf']ggi Y'UbX'h\Y'_YmWcbWfdhg ]bj c`j YX				
8Ya cbglfUllYg'i bXYfglUbX]b[ 'cZh\Y'lUg_'l\fci [\'UXXfYgg]b[ 'U`` fYei ]fYX'Wca dcbYblg'Ug'`]glYX']b'l\Y'lUg_'ci h]bY				

GdYW]Z]W7 f]HYf]U	¨flŁ—		 2fŽŁ
<ul> <li>5 VWV fUHY 'UbX'th\cfci [\'UthYbh]cb'tc'k f]thYb'thYl hi U`fYei ]fYa Ybhg. gYbhYbVW ghfi Whi fYž'j cWUVi `Ufmž'gdY``]b[ž'di bWhi Uh]cbž'UbX [fUa a Uf</li> </ul>			
<ul> <li>7`Uf]hmž'Uddfcdf]UhYbYgg'UbX'YZZYWfj YbYgg']b'dYfgi Ug]j Y'UbX UbU`mfjWU`k f]hjb[</li> </ul>			
<ul> <li>7`Uf]mž'Wcbg]ghYbWnUbX'Uddfcdf]UhYbYgg'cZUWUXYa]Wk f]hhYb Wcbj Ybh]cbg'Zcf'5D5'ghm)Y</li> </ul>			
• 5X\YfYg'hc'kcfX'`Yb[h\.'k]h\]b'%\$i 'cjYf#bXYf			
; YbYfU`Wca a Ybhg#fYWca a YbXUh]cbgʻZcfʻbYl hh]a Y.			

GdYWJZJW7 f]hYf]U	¨flŁ—		 2fŽŁ
		•	•

	dd"'')-!',)Ł"'CIZcfX'Ib]jYfg]lmiDfYgg"



FYUX]b[.
6U[bU``žB"'f&\$% Ł"; `cVU`]gUhJcb"'+b'K Y`WXž5"ž 7 cbbY``žF "žA cW_`YfžB"žGf]dfU_Ug\ž5"žDfcWcfž <"ž <umygž8"ž: "ž6u[bu``žb"ž="" "ž@ck="" ',="" 'f(h\="" *!(\$(ł"'c="" 6i="" 7="" 9x"ždd"="" ;="" ]h\žg"'="" _ł="" b]j="" bxk="" c`ymž8"žj]w_yfgža="" d`="" fbgž?="" fci="" g="" r_u="" td="" trez="" tyr_xv="" tz="" uf="" uhyf!ga="" yfg]lmdfygg"<="" zcfx' =""  ="" žf"'=""></umygž8"ž:>
K Y`W\ž5"f&\$% Ł"A U_]b[ 'YXi WUh]cb'dc`]Wh' do K Y`W\ž5"ž7cbbY``žF "žA cW_`YfžB"žGf]dfU_Ug\ž5"žDfcWhcfž<"ž <umygž8"ž: "ž6u[="" "ž@ck="" &*%!`\$&ł"'cizcfx`i="" '9x"ždd"="" 'f('h\="" ;="" b]j="" bu``žb"ž6i="" bxk="" c`ymž8"žj]w_yfgža="" d`tzvej="" fbgž?="" fci="" r_u="" td="" tyr_xv="" uhyf!ga]h\žg"'7uftrez_ł="" yfg]hmdfygg"<="" žf"=""></umygž8"ž:>

## Fygci fWyg

DfYgWf]VYX F Ygci fWYg

 $\label{eq:KYWXZS} K Y`WXZS"Z7cbbY``ZF"ZAcW_YfZB"ZGf]dfU_Ug\ZS"ZDfcWfcfZ<"Z<UmYgZ8"Z: c`YmZ8"ZJ]W_YfgZA"Z 6U[bU``ZB"Z6i fbgZ?"Z@ckZF"/; fci bXk UhYf!Ga]h\ZG"`f&$% L"9Xi WUh]cbZWXUb[Y`UbX`gcW]Yfmf(h\`9X"L"ClZcfX`lb]j Yfg]fmDfYgg"$ 

# Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

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

Image: Ybwci bhYf'U'dfcV'Ya k \Yb'UhYa dhJb['hc'gi Va ]hmci f'Ugg][ ba Ybht\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"'=Imci
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]cbž'Vi hmci
a i ghfYhJ]b'mci f'hJW\_Yhbi a VYf'Zfca '9! hYfbU'`Gi ddcfhfU'cb['k]h\'Ubmch\Yf'fY'Yj UbhXcW a YbhgŁ'hc
]bWi XY'Ug'Yj ]XYbW'hc'gi ddcfhmci f'Y! hYbg]cb'Udd']WUhJcb"'=Imci 'Ya U]''9! hYfbU'`Gi ddcfhmci 'k]'`
Ui hca UhJWJ'`mfYWY]j Y'U'hJW\_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]'``bYYX'hc'gdYWJZJWJ'`mUg\_'Zcf'cbY''
Hi fb]hJb'U'gc'dfcj ]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'ghUh' g'cb'Hk]hYf"

; YbYfU``mž'UggYgga YbhiHug\_g'a i gh'VY'gi Va ]hhYX'Y`YWfcb]WJ``mj ]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ ba Ybh'' = D']bgHJbWYg'k \YfY'h\]g']g'bchdcgg]V'Yž']hk ]``VY'gHJhYX'cb'mci f'Wci fgY'g'A ccX`Y'g]hY'k ]h\

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

D`U[]Uf]ga `]g`i g]b[ 'h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX`dfYgYbh]b[ 'h\Ya `Ug`mci f`ck b"`=hWJb`hJ\_Y`a Ubm Zcfa gžZca `XY`]VYfUhY`W\YUh]b[ 'hc`UVW]XYbhJ``mWcdm]b[ 'Zfca `U`gci fWY`k ]h\ci hUW\_bck `YX[ Ya Ybh'

IBGK [fcidgdu[]Uf]ga ]bhch\YZc``ck]b[WUhY[cf]Yg.

 $\begin{tabular}{ll} \hline \textbf{7.cdm}b[...] g]b[...] MY cf'j Yfmg]a] ``Uf'k cfXg'hc'h\Y'cf][] bU``HYI hcf']XYU'k]h\ci h`U\W_bck ``YX[]b[...] b[...] MY cf'i g]b[...] bU``HYI hcf']XYU'k]h\ci h`U\W_bck ``YX[]b[...] b[...] MY cf'i g]b[...] a UhYf]U`gž']XYUg'cf'WcbW'dhg'\faca '`U'Vcc_\text{z}'Ufh]WY\text{z} bU'Vcd_\text{z}'Ufh]WY\text{z} bU'Vcd_\text{z}'Ufh]WY\text{z}'Ufh]WY\text{z} bU'Vcd_\text{z}'Ufh]WY\text{$ 

### 5 WUXYa ]W + DZcfa Uh]cb

8 i Y 'hc 'Yj c'j ]b[ 'UXj ]\W 'VmBGK '< YU't\ ž'ghi XYbhg'a i gh'\W.Y\<u>V</u>'Zcf'i dXUh\YX']bZcfa Uh]cb 'fY[ UfX]b[ 'cb`]bY 'YUfb]b[ 'Zcf'U``'5fhgž'8Yg][ b 'UbX'5f\W.]h\Y\ni fY '\wci fgYg't\]g't\Yfa 'f] ]U'A ccX`Y'cf'\wci fgY']bZcfa Uh]cb dfcj ]\XYX"Ł

: cf`YggYbhJU``gh XYbh`]bZcfa UhJcb`fY`UhJb[ 'hc.

- fYei YghgʻZcfʻYl hYbg]cb/
- `UhY gi Va ]gg]cbg [ i ]XY`]bYg/
- fYj]Yk cZa Uf\_g/
- I BGK '< YU`h\ 'UbX'GUZYhm'dc`]W]Yg/
- YI Ua ]bUh]cb dfcWYXi fYg/

•