AKADEMIA OBRONY NARODOWEJ

WYDZIAŁ WOJSK LOTNICZYCH I OP

[redacted]

Ppłk dypl. nawig. inż. Marek GRZEGORZEWSKI

CZASOWE I PRZESTRZENNE UWARUNKOWANIA ZASTOSOWANIA BOJOWEGO SAMOLOTU MiG-29

Załącznik nr 2 do rozprawy doktorskiej

Biblioteka Główna
Akademii Obrony Narodowej
S/2691 Zał.2a
05-002691-002-0

BIBLIOTEKA GŁÓWNA - ARCHIWUM
Nr ewid.
54854

WARSZAWA **1994**

AKADEMIA OBRONY NARODOWEJ

WYDZIAŁ WOJSK LOTNICZYCH I OP

54854

~~Do użytku służbowego~~

Ppłk dypl. nawig. inż. Marek GRZEGORZEWSKI

CZASOWE I PRZESTRZENNE UWARUNKOWANIA ZASTOSOWANIA BOJOWEGO SAMOLOTU MiG-29

Załącznik nr 2 do rozprawy doktorskiej

PROGRAM

Symulator MiG-29, symulacja zasięgu i długotrwałości lotu

WARSZAWA **1994**

ZAŁĄCZNIK 2

Program

Symulator MIG-29 , symulacja zasięgu i długotrwałości lotu

```
Global Const SW_MAXIMIZE = 3
Global Const SW_MAXIMIZE = 3
Global Const SW_NORMAL = 1

Declare Function wu_CheckMenuItem Lib "User" Alias "CheckMenuItem" (ByVal hMenu%, ByVal
idEnableItem%, ByVal uEnable%) As Integer
Declare Sub wu_DrawMenuBar Lib "User" Alias "DrawMenuBar" (ByVal hWnd%)
Declare Function wu_EnableMenuItem Lib "User" Alias "EnableMenuItem" (ByVal hMenu%, ByVal
idEnableItem%, ByVal uEnable%) As Integer
Declare Function wu_GetActiveWindow Lib "User" Alias "GetActiveWindow" () As Integer
Declare Function wu_GetClassName Lib "User" Alias "GetClassName" (ByVal hwin%, ByVal stBuf$,
ByVal cch%) As Integer

Declare Function wu_GetDC Lib "User" Alias "GetDC" (ByVal hw%) As Integer
Declare Function wu_GetDesktopWindow Lib "User" Alias "GetDesktopWindow" () As Integer
Declare Function wu_GetDeviceCaps Lib "GDI" Alias "GetDeviceCaps" (ByVal hDC%, ByVal
iCapability%) As Integer
Declare Function wu_GetFocus Lib "User" Alias "GetFocus" () As Integer
Declare Function wu_GetMenu Lib "User" Alias "GetMenu" (ByVal hWnd%) As Integer
Declare Function wu_GetMenuState Lib "User" Alias "GetMenuState" (ByVal hMenu%, ByVal
idItem%, ByVal fuFlags%) As Integer
Declare Function wu_GetParent Lib "User" Alias "GetParent" (ByVal hwin%) As Integer
Declare Function wu_GetSubMenu Lib "User" Alias "GetSubMenu" (ByVal hMenu%, ByVal nPos%)
As Integer
Declare Function wu_GetWindow Lib "User" Alias "GetWindow" (ByVal hw%, ByVal nRelationship%)
As Integer
Declare Function wu_IsZoomed Lib "User" Alias "IsZoomed" (ByVal hWnd%) As Integer
Declare Function wu_MoveWindow Lib "User" Alias "MoveWindow" (ByVal hwin%, ByVal x%, ByVal
y%, ByVal dx%, ByVal dy%, ByVal fRepaint%) As Integer
Declare Function wu_SetFocus Lib "User" Alias "SetFocus" (ByVal hwin%) As Integer
Declare Function wu_ShowWindow Lib "User" Alias "ShowWindow" (ByVal hWnd%, ByVal i%) As
Integer
Declare Function wu_SetWindowText Lib "User" Alias "SetWindowText" (ByVal hWnd%, ByVal
lpString$) As Integer
Declare Function WinExec Lib "kernel" (ByVal lpCmdLine As String, ByVal nCmdShow As Integer)
As Integer


Global Const pi# = 3.1415927
Global Const R# = 6367558
Global Const c# = 6399698.9
Global Const k1# = 135.3277
Global Const k2# = 32140.405
Global Const e2# = .0067385254
Global a As Double
Global n As Double
Global nn As Double
Global fi As Double
Global b As Double
Global l As Double
Global x As Double
Global y As Double

'zmienne formularza edit

Global Const numboxes = 8
Global Const yesval% = 6
Global Const savefile = 1, loadfile = 2
Global Const replacefile = 1, readfile = 2, addtofile = 3
```

```
Global Const randomfile = 4, binaryfile = 5
Global Const err_deviceunavailable = 68
Global Const err_disknotready = 71, err_filealreadyexists = 58
Global Const err_toomanyfiles = 67, err_renameacrossdisks = 74
Global Const err_path_fileaccesserror = 75, err_deviceio = 57
Global Const err_diskfull = 61, err_badfilename = 64
Global Const errbadfilenameornumber = 52, err_filenotfound = 53
Global Const err_pathdoesnotexist = 76, err_badfilemode = 54
Global Const err_filealreadyopen = 55, err_inputpastendoffile = 62
Global Const mb_exclaim = 48
Global Const constmb_stop = 16

Type recordtype
  recordnum As Long
  zm1 As Double
  zm2 As Double
  zm3 As Double
  zm4 As Double
  zm5 As Double
  zm6 As Double
  zm7 As Double
  zm8 As Double

 End Type
Type recordtype1
  recordnum As Long
  zm1 As String
  zm2 As String
  zm3 As String
  zm4 As String
  zm5 As String
  zm6 As String
  zm7 As String
  zm8 As String

End Type


Global recordvar As recordtype
Global recordvar1 As recordtype1
Global recordnumber As Long
Global position As Long
Global workingfilename As String
Global workingfilenum As Integer
Global bakname As String
Global lastrecord As Long
Global tempfileflag As Integer
Global newrecordflag As Integer
Global oldcontents(0 To 7) As String
Global fileinfotitle As String
Global thenewpath As String
Global thefilename As String

'Zmienne formularza Paliwo

Global Qr As Double 'eksploatacyjny calkowity rozporzadzalny zapas paliwa
Global Qro As Double 'Obliczeniowy zapas paliwa
Global Ro As Double

Global Pzip As Double
```

```
Global Pdzp As Double

'zmienne formularza uzbrojenie i wspolne z powyzszym

Global Mspst As Double 'masa przedstartowa
Global Cxs As Double

 'zmienne formularza glowna comand1

Global Msst As Double 'masa startowa
Global Qpz As Double   'ilosc paliwa zuzywanego na ziemi
Global Qlad As Double 'ilość paliwa zużywana na lądowanie
Global Qwzn As Double 'ilośćpaliwa zużywana na wznoszenie się na wysokość lotu
Global tz As Double  ' czas pracy silnikow na ziemi
Const qz = 20 'wartosc statystyczna [kg/min]
Const qkr = 50 'wartość średnia [kg/min]

 'zmienne urzywane w module1.bas

 Const nb = 11  'stopień barometryczny
 Global Vp As Double
 Global Hb As Double

 Global Hp As Double
 Global dH As Double
 Global dHb As Double
 Global dHp As Double
 Global dHa As Double
 Global Th As Double
 Global T0 As Double
 Global dTh As Double
 Global dHter As Double
 Global pl As Double
 Global pt As Double
 Global Vpodr As Double
 Global Vr As Double
 Global Ma As Double
 Global Map As Double

'zmienne użyte w module1 i formie wiatr i zbiórki

 Global U As Double
 Global Ue As Double
 Global Dm As Double
 Global Dn As Double
 Global deltaM As Double
 Global liczba_sam As Double
 Global warunki_atm As Double
 Global wiatr_tab(1 To 8, 1 To 3) As Double
 Global warunki_atm_z As Double
 Global warunki_atm_t As Double
 Global grubosc_chmur As Double
 Global dolna_podstawa_chmur As Double

'zmienne formularza etapy, punkty zwrotne , współrzędne

Global Beta As Double
Global tab_pz(1 To 20, 1 To 10)  As Double
Global tab_odc(1 To 18, 1 To 20, 1 To 14)   As Double
Global fi_lot_st As Double
```

```
Global fi_lot_lad As Double
Global tab_kat_lot(1 To 2, 1 To 2)  As Double  'tablica kątów i ciśnień na lotniskach
Global numer_etapu As Double
Global iw As Integer
Global droga_lotu As Double

 'wprowadzanie danych1

Global zapas_nawigacyjny As Double
Global zapas_techniczny As Double
Global tlad As Double   'czas lądowania


  ' lot poziomy

Global zakres As Double
Global hrlnp As Double
Global Msls As Double
Global Wqk As Double
Global n2 As Double
Global qs As Double

' start i wznoszenie

Global dtsr As Double 'temperatura srednia
Global zmwy As Double
Global pulap_pr As Double
Global Twzn As Double
Global Lwzn As Double


'Przechwycenie obcy
Global Hc As Double
Global Vc As Double
Global Kc As Double
Global dwykrl As Double  'traktuje jak dwykr_lotniska
Global tpas As Double
Global dlo As Double ' wzależności od rodzaju półsfery
Global Vm As Double   ' prędkość myśliwca
Global Ssum As Double
Global tsum As Double
Global Srww As Double
Global tman As Double
Global Swzn As Double

'zniżanie i lądowanie

Global qzn As Double
Global tzn As Double
Global lzn As Double

' pol_excel
Global rt As Double
Global Kt As Double  'współczynnik temperatury
Global qlp As Double
Global Ch As Double  'zużycie godzinowe
Global mslsr As Double 'masa samolotu w locie średnia

'************************************************************
```

```
'U W A G A !!!


'**********************************************************************

'=========='
'          '
' General '
'          '
'=========='

' Booleans
'Global Const TRUE = -1
'Global Const FALSE = 0

'==================='
'                   '
' Event parameters '
'                   '
'==================='

' Button and Shift (KeyDown, KeyUp, MouseDown, MouseMove, MouseUp)
Global Const SHIFT_MASK = 1
Global Const CTRL_MASK = 2
Global Const ALT_MASK = 4
Global Const LEFT_BUTTON = 1
Global Const RIGHT_BUTTON = 2
Global Const MIDDLE_BUTTON = 4

' ErrNum (LinkError)
Global Const WRONG_FORMAT = 1
Global Const REQUEST_WITHOUT_INIT = 2
Global Const DDE_WITHOUT_INIT = 3
Global Const ADVISE_WITHOUT_INIT = 4
Global Const POKE_WITHOUT_INIT = 5
Global Const DDE_SERVER_CLOSED = 6
Global Const TOO_MANY_LINKS = 7
Global Const STRING_TOO_LONG = 8
Global Const INVALID_CONTROL_ARRAY_REFERENCE = 9
Global Const UNEXPECTED_DDE = 10
Global Const OUT_OF_MEMORY = 11
Global Const SERVER_ATTEMPTED_CLIENT_OPERATION = 12

' KeyCode (KeyDown, KeyUp)
Global Const KEY_LBUTTON = &H1
Global Const KEY_RBUTTON = &H2
Global Const KEY_CANCEL = &H3
Global Const KEY_MBUTTON = &H4        ' NOT contiguous with L & RBUTTON
Global Const KEY_BACK = &H8
Global Const KEY_TAB = &H9
Global Const KEY_CLEAR = &HC
Global Const KEY_RETURN = &HD
Global Const KEY_SHIFT = &H10
Global Const KEY_CONTROL = &H11
Global Const KEY_MENU = &H12
Global Const KEY_PAUSE = &H13
Global Const KEY_CAPITAL = &H14
```

```
Global Const KEY_ESCAPE = &H1B
Global Const KEY_SPACE = &H20
Global Const KEY_PRIOR = &H21
Global Const KEY_NEXT = &H22
Global Const KEY_END = &H23
Global Const KEY_HOME = &H24
Global Const KEY_LEFT = &H25
Global Const KEY_UP = &H26
Global Const KEY_RIGHT = &H27
Global Const KEY_DOWN = &H28
Global Const KEY_SELECT = &H29
Global Const KEY_PRINT = &H2A
Global Const KEY_EXECUTE = &H2B
Global Const KEY_SNAPSHOT = &H2C
Global Const KEY_INSERT = &H2D
Global Const KEY_DELETE = &H2E
Global Const KEY_HELP = &H2F

' KEY_A thru KEY_Z are the same as their ASCII equivalents: 'A' thru 'Z'
' KEY_0 thru KEY_9 are the same as their ASCII equivalents: '0' thru '9'

Global Const KEY_NUMPAD0 = &H60
Global Const KEY_NUMPAD1 = &H61
Global Const KEY_NUMPAD2 = &H62
Global Const KEY_NUMPAD3 = &H63
Global Const KEY_NUMPAD4 = &H64
Global Const KEY_NUMPAD5 = &H65
Global Const KEY_NUMPAD6 = &H66
Global Const KEY_NUMPAD7 = &H67
Global Const KEY_NUMPAD8 = &H68
Global Const KEY_NUMPAD9 = &H69
Global Const KEY_MULTIPLY = &H6A
Global Const KEY_ADD = &H6B
Global Const KEY_SEPARATOR = &H6C
Global Const KEY_SUBTRACT = &H6D
Global Const KEY_DECIMAL = &H6E
Global Const KEY_DIVIDE = &H6F
Global Const KEY_F1 = &H70
Global Const KEY_F2 = &H71
Global Const KEY_F3 = &H72
Global Const KEY_F4 = &H73
Global Const KEY_F5 = &H74
Global Const KEY_F6 = &H75
Global Const KEY_F7 = &H76
Global Const KEY_F8 = &H77
Global Const KEY_F9 = &H78
Global Const KEY_F10 = &H79
Global Const KEY_F11 = &H7A
Global Const KEY_F12 = &H7B
Global Const KEY_F13 = &H7C
Global Const KEY_F14 = &H7D
Global Const KEY_F15 = &H7E
Global Const KEY_F16 = &H7F
Global Const KEY_NUMLOCK = &H90

' State (DragOver)
Global Const ENTER = 0
Global Const LEAVE = 1
Global Const OVER = 2
```

```
'====================='
'                     '
' Function parameters '
'                     '
'====================='

' MsgBox parameters
Global Const MB_OK = 0                ' OK button only
Global Const MB_OKCANCEL = 1          ' OK and Cancel buttons
Global Const MB_ABORTRETRYIGNORE = 2  ' Abort, Retry, and Ignore buttons
Global Const MB_YESNOCANCEL = 3       ' Yes, No, and Cancel buttons
Global Const MB_YESNO = 4             ' Yes and No buttons
Global Const MB_RETRYCANCEL = 5       ' Retry and Cancel buttons

Global Const MB_ICONSTOP = 16         ' Critical message
Global Const MB_ICONQUESTION = 32     ' Warning query
Global Const MB_ICONEXCLAMATION = 48  ' Warning message
Global Const MB_ICONINFORMATION = 64  ' Information message

Global Const MB_DEFBUTTON1 = 0        ' First button is default
Global Const MB_DEFBUTTON2 = 256      ' Second button is default
Global Const MB_DEFBUTTON3 = 512      ' Third button is default

' MsgBox return values
Global Const IDOK = 1                 ' OK button pressed
Global Const IDCANCEL = 2             ' Cancel button pressed
Global Const IDABORT = 3              ' Abort button pressed
Global Const IDRETRY = 4              ' Retry button pressed
Global Const IDIGNORE = 5             ' Ignore button pressed
Global Const IDYES = 6                ' Yes button pressed
Global Const IDNO = 7                 ' No button pressed


'====================='
'                     '
' Method parameters '
'                     '
'====================='

' Drag (controls)
Global Const CANCEL = 0
Global Const BEGIN_DRAG = 1
Global Const END_DRAG = 2

' GetData, GetFormat, SetData (Clipboard)
Global Const CF_LINK = &HBF00
Global Const CF_TEXT = 1
Global Const CF_BITMAP = 2
Global Const CF_METAFILE = 3
Global Const CF_DIB = 8

' Show (form)
Global Const MODAL = 1
Global Const MODELESS = 0

'==================='
'                   '
' Property values '
'                   '
'==================='
```

```
' Alignment (label)
Global Const LEFT_JUSTIFY = 0         ' 0 - Left Justify
Global Const RIGHT_JUSTIFY = 1        ' 1 - Right Justify
Global Const CENTER = 2               ' 2 - Center

' BackColor, ForeColor, FillColor (standard RGB colors: form, controls)
Global Const BLACK = &H0&
Global Const RED = &HFF&
Global Const GREEN = &HFF00&
Global Const YELLOW = &HFFFF&
Global Const BLUE = &HFF0000
Global Const MAGENTA = &HFF00FF
Global Const CYAN = &HFFFF00
Global Const WHITE = &HFFFFFF

' BackColor, ForeColor, FillColor (system colors: form, controls)
Global Const SCROLL_BARS = &H80000000          ' Scroll-bars gray area.
Global Const DESKTOP = &H80000001              ' Desktop.
Global Const ACTIVE_TITLE_BAR = &H80000002     ' Active window caption.
Global Const INACTIVE_TITLE_BAR = &H80000003   ' Inactive window caption.
Global Const MENU_BAR = &H80000004             ' Menu background.
Global Const WINDOW_BACKGROUND = &H80000005    ' Window background.
Global Const WINDOW_FRAME = &H80000006         ' Window frame.
Global Const MENU_TEXT = &H80000007            ' Text in menus.
Global Const WINDOW_TEXT = &H80000008          ' Text in windows.
Global Const TITLE_BAR_TEXT = &H80000009       ' Text in caption, size box, scroll-bar arrow box..
Global Const ACTIVE_BORDER = &H8000000A        ' Active window border.
Global Const INACTIVE_BORDER = &H8000000B      ' Inactive window border.
Global Const APPLICATION_WORKSPACE = &H8000000C ' Background color of multiple document
interface (MDI) applications.
Global Const HIGHLIGHT = &H8000000D            ' Items selected item in a control.
Global Const HIGHLIGHT_TEXT = &H8000000E       ' Text of item selected in a control.
Global Const BUTTON_FACE = &H8000000F          ' Face shading on command buttons.
Global Const BUTTON_SHADOW = &H80000010        ' Edge shading on command buttons.
Global Const GRAY_TEXT = &H80000011            ' Grayed (disabled) text.  This color is set to 0 if
the current display driver does not support a solid gray color.
Global Const BUTTON_TEXT = &H80000012          ' Text on push buttons.

' BorderStyle (form, label, picture box, text box)
Global Const NONE = 0                 ' 0 - None
Global Const FIXED_SINGLE = 1         ' 1 - Fixed Single
Global Const SIZABLE = 2              ' 2 - Sizable (Forms only)
Global Const FIXED_DOUBLE = 3         ' 3 - Fixed Double (Forms only)

' DragMode (controls)
Global Const MANUAL = 0               ' 0 - Manual
Global Const AUTOMATIC = 1            ' 1 - Automatic

' DrawMode (form, picture box, Printer)
Global Const BLACKNESS = 1            ' 1 - Blackness
Global Const NOT_MERGE_PEN = 2        ' 2 - Not Merge Pen
Global Const MASK_NOT_PEN = 3         ' 3 - Mask Not Pen
Global Const NOT_COPY_PEN = 4         ' 4 - Not Copy Pen
Global Const MASK_PEN_NOT = 5         ' 5 - Mask Pen Not
Global Const INVERT = 6               ' 6 - Invert
Global Const XOR_PEN = 7              ' 7 - Xor Pen
Global Const NOT_MASK_PEN = 8         ' 8 - Not Mask Pen
Global Const MASK_PEN = 9             ' 9 - Mask Pen
Global Const NOT_XOR_PEN = 10         ' 10 - Not Xor Pen
```

```
Global Const NOP = 11               ' 11 - Nop
Global Const MERGE_NOT_PEN = 12     ' 12 - Merge Not Pen
Global Const COPY_PEN = 13          ' 13 - Copy Pen
Global Const MERGE_PEN_NOT = 14     ' 14 - Merge Pen Not
Global Const MERGE_PEN = 15         ' 15 - Merge Pen
Global Const WHITENESS = 16         ' 16 - Whiteness

' DrawStyle (form, picture box, Printer)
Global Const SOLID = 0              ' 0 - Solid
Global Const DASH = 1               ' 1 - Dash
Global Const DOT = 2                ' 2 - Dot
Global Const DASH_DOT = 3           ' 3 - Dash-Dot
Global Const DASH_DOT_DOT = 4       ' 4 - Dash-Dot-Dot
Global Const INVISIBLE = 5          ' 5 - Invisible
Global Const INSIDE_SOLID = 6       ' 6 - Inside Solid

' FillStyle (form, picture box, Printer)
' Global Const SOLID = 0            ' 0 - Solid
Global Const TRANSPARENT = 1        ' 1 - Transparent
Global Const HORIZONTAL_LINE = 2    ' 2 - Horizontal Line
Global Const VERTICAL_LINE = 3      ' 3 - Vertical Line
Global Const UPWARD_DIAGONAL = 4    ' 4 - Upward Diagonal
Global Const DOWNWARD_DIAGONAL = 5  ' 5 - Downward Diagonal
Global Const CROSS = 6              ' 6 - Cross
Global Const DIAGONAL_CROSS = 7     ' 7 - Diagonal Cross

' LinkMode (controls)
' Global Const NONE = 0             ' 0 - None
Global Const HOT = 1                ' 1 - Hot
Global Const COLD = 2               ' 2 - Cold

' LinkMode (form)
' Global Const NONE = 0             ' 0 - None
Global Const SERVER = 1             ' 1 - Server

' MousePointer (form, controls)
Global Const DEFAULT = 0            ' 0 - Default
Global Const ARROW = 1              ' 1 - Arrow
Global Const CROSSHAIR = 2          ' 2 - Cross
Global Const IBEAM = 3              ' 3 - I-Beam
Global Const ICON_POINTER = 4       ' 4 - Icon
Global Const SIZE_POINTER = 5       ' 5 - Size
Global Const SIZE_NE_SW = 6         ' 6 - Size NE SW
Global Const SIZE_N_S = 7           ' 7 - Size N S
Global Const SIZE_NW_SE = 8         ' 8 - Size NW SE
Global Const SIZE_W_E = 9           ' 9 - Size W E
Global Const UP_ARROW = 10          ' 10 - Up Arrow
Global Const HOURGLASS = 11         ' 11 - Hourglass
Global Const NO_DROP = 12           ' 12 - No drop

' ScaleMode (form, picture box, Printer)
Global Const USER = 0               ' 0 - User
Global Const TWIPS = 1              ' 1 - Twip
Global Const POINTS = 2             ' 2 - Point
Global Const PIXELS = 3             ' 3 - Pixel
Global Const CHARACTERS = 4         ' 4 - Character
Global Const INCHES = 5             ' 5 - Inch
Global Const MILLIMETERS = 6        ' 6 - Millimeter
Global Const CENTIMETERS = 7        ' 7 - Centimeter
```

```
' ScrollBar (text box)
' Global Const NONE = 0              ' 0 - None
Global Const HORIZONTAL = 1          ' 1 - Horizontal
Global Const VERTICAL = 2            ' 2 - Vertical
Global Const BOTH = 3                ' 3 - Both

' Value (check box)
Global Const UNCHECKED = 0           ' 0 - Unchecked
Global Const CHECKED = 1             ' 1 - Checked
Global Const GRAYED = 2              ' 2 - Grayed

' WindowState (form)
Global Const NORMAL = 0              ' 0 - Normal
Global Const MINIMIZED = 1           ' 1 - Minimized
Global Const MAXIMIZED = 2           ' 2 - Maximized

'*****************************************************


        'KONIEC

Option Explicit
'Global Const NONE = 0

' Clipboard formats
'Global Const CF_LINK = &HBF00
'Global Const CF_TEXT = 1
'Global Const CF_BITMAP = 2
'Global Const CF_METAFILE = 3
'Global Const CF_DIB = 8

'Global Const MODAL = 1

' ErrNum (LinkError)
'Global Const WRONG_FORMAT = 1
'Global Const DDE_SOURCE_CLOSED = 6
'Global Const TOO_MANY_LINKS = 7
'lobal Const DATA_TRANSFER_FAILED = 8

' MousePointer
'Global Const DEFAULT = 0
'Global Const HOURGLASS = 11

' LinkMode (forms and controls)
Global Const LINK_SOURCE = 1
Global Const LINK_AUTOMATIC = 1
Global Const LINK_MANUAL = 2
```

MODUL1.BAS

```
Dim recordvar As recordtype
Dim recordrob As recordtype

Function Dm_Dn (rob As Double) As Double
 If rob <= 180 Then
   Dm_Dn = rob + 180 - deltaM
  Else
```

```
  Dm_Dn = rob - 180 - deltaM
 End If


End Function

Function kmh_ms (rob As Double) As Double
  kmh_ms = rob / 3.6

End Function

Sub kurs_wysokosc (numer_etapu As Double, wysokosc As Double, vr As Double)
'numer_etapu określa cały odcinek aby wskazać właściwy NKDM
'liczony jest KZ,KW,KM w zależności od wysokości,Vr,itd

Dim beja As Double
Dim beja1 As Double
Dim kw As Double
Dim kz As Double

If wysokosc > 0 And wysokosc < 1000 Then
  wysokosc = 1000
End If
If wysokosc >= 1000 And wysokosc < 1500 Then
  wysokosc = 1000
End If
If wysokosc >= 1500 And wysokosc < 2000 Then
  wysokosc = 2000
End If
If wysokosc >= 2000 And wysokosc < 2500 Then
  wysokosc = 2000
End If
If wysokosc >= 2500 And wysokosc < 3000 Then
  wysokosc = 3000
End If
If wysokosc >= 3000 And wysokosc < 3500 Then
  wysokosc = 3000
End If
If wysokosc >= 3500 And wysokosc < 4000 Then
  wysokosc = 4000
End If
If wysokosc >= 4000 And wysokosc < 4500 Then
  wysokosc = 4000
End If
If wysokosc >= 4500 And wysokosc < 5000 Then
  wysokosc = 5000
End If
If wysokosc >= 5000 And wysokosc < 5500 Then
  wysokosc = 5000
End If
If wysokosc >= 5500 And wysokosc < 6000 Then
  wysokosc = 6000
End If
If wysokosc >= 6000 And wysokosc < 6500 Then
  wysokosc = 6000
End If
If wysokosc >= 6500 And wysokosc < 7000 Then
  wysokosc = 7000
End If
If wysokosc >= 7000 And wysokosc < 7500 Then
```

```
  wysokosc = 7000
End If
If wysokosc >= 7500 And wysokosc < 8000 Then
  wysokosc = 8000
End If
If wysokosc >= 8000 And wysokosc < 8500 Then
  wysokosc = 8000
End If
If wysokosc >= 8500 And wysokosc < 9000 Then
  wysokosc = 9000
End If
If wysokosc >= 9000 And wysokosc < 9500 Then
  wysokosc = 9000
End If
If wysokosc >= 9500 And wysokosc < 10000 Then
  wysokosc = 10000
End If
If wysokosc >= 10000 And wysokosc < 10500 Then
  wysokosc = 10000
End If
If wysokosc >= 10500 And wysokosc < 11000 Then
  wysokosc = 11000
End If
If wysokosc >= 11000 And wysokosc < 11500 Then
  wysokosc = 11000
End If
If wysokosc >= 11500 And wysokosc < 12000 Then
  wysokosc = 12000
End If
If wysokosc >= 12000 And wysokosc < 12500 Then
  wysokosc = 12000
End If
If wysokosc >= 12500 Then
  wysokosc = 13000
End If

Select Case wysokosc

 Case 1000
  kw = wiatr_tab(1, 3) - tab_pz(numer_etapu, 6)
  If kw > 180 Then
    If Sgn(kw) = -1 Then
      kw = 360 + kw
    Else
      kw = 360 - kw
    End If
  End If
  kz = wiatr_tab(1, 2) * 60 / vr * Sin(kw)
  km = tab_pz(numer_etapu, 6) - kz
  wysokosc = kw
  numer_etapu = km

 Case 2000
  kw = (wiatr_tab(1, 3) + wiatr_tab(2, 3)) / 2 - tab_pz(numer_etapu, 6)
  If kw > 180 Then
    If Sgn(kw) = -1 Then
      kw = 360 + kw
    Else
      kw = 360 - kw
    End If
```

```
 End If
 kz = ((wiatr_tab(1, 2) + wiatr_tab(1, 2)) / 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km

Case 3000
 kw = wiatr_tab(2, 3) - tab_pz(numer_etapu, 6)
 If kw > 180 Then
  If Sgn(kw) = -1 Then
   kw = 360 + kw
  Else
   kw = 360 - kw
  End If
 End If
 kz = wiatr_tab(2, 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km

Case 4000
 kw = (wiatr_tab(2, 3) + wiatr_tab(3, 3)) / 2 - tab_pz(numer_etapu, 6)
 If kw > 180 Then
  If Sgn(kw) = -1 Then
   kw = 360 + kw
  Else
   kw = 360 - kw
  End If
 End If
 kz = ((wiatr_tab(2, 2) + wiatr_tab(3, 2)) / 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km


Case 5000
 kw = wiatr_tab(3, 3) - tab_pz(numer_etapu, 6)
 If kw > 180 Then
  If Sgn(kw) = -1 Then
   kw = 360 + kw
  Else
   kw = 360 - kw
  End If
 End If
 kz = wiatr_tab(3, 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km
Case 6000
 kw = (wiatr_tab(3, 3) + wiatr_tab(4, 3)) / 2 - tab_pz(numer_etapu, 6)
 If kw > 180 Then
  If Sgn(kw) = -1 Then
   kw = 360 + kw
  Else
   kw = 360 - kw
  End If
 End If
 kz = ((wiatr_tab(3, 2) + wiatr_tab(4, 2)) / 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
```

```
 numer_etapu = km


Case 7000
 kw = wiatr_tab(4, 3) - tab_pz(numer_etapu, 6)
 If kw > 180 Then
   If Sgn(kw) = -1 Then
     kw = 360 + kw
    Else
     kw = 360 - kw
   End If
 End If
 kz = wiatr_tab(4, 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km

Case 8000
 kw = (wiatr_tab(4, 3) + wiatr_tab(5, 3)) / 2 - tab_pz(numer_etapu, 6)
 If kw > 180 Then
   If Sgn(kw) = -1 Then
     kw = 360 + kw
    Else
     kw = 360 - kw
   End If
 End If
 kz = ((wiatr_tab(4, 2) + wiatr_tab(5, 2)) / 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km


Case 9000
 kw = wiatr_tab(5, 3) - tab_pz(numer_etapu, 6)
 If kw > 180 Then
   If Sgn(kw) = -1 Then
     kw = 360 + kw
    Else
     kw = 360 - kw
   End If
 End If
 kz = wiatr_tab(5, 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km

Case 10000
 kw = (wiatr_tab(5, 3) + wiatr_tab(6, 3)) / 2 - tab_pz(numer_etapu, 6)
 If kw > 180 Then
   If Sgn(kw) = -1 Then
     kw = 360 + kw
    Else
     kw = 360 - kw
   End If
 End If
 kz = ((wiatr_tab(5, 2) + wiatr_tab(6, 2)) / 2) * 60 / vr * Sin(kw)
 km = tab_pz(numer_etapu, 6) - kz
 wysokosc = kw
 numer_etapu = km
```

```
 Case 11000
  kw = wiatr_tab(6, 3) - tab_pz(numer_etapu, 6)
  If kw > 180 Then
    If Sgn(kw) = -1 Then
      kw = 360 + kw
     Else
      kw = 360 - kw
    End If
  End If
  kz = wiatr_tab(6, 2) * 60 / vr * Sin(kw)
  km = tab_pz(numer_etapu, 6) - kz
  wysokosc = kw
  numer_etapu = km

 Case 12000
  kw = (wiatr_tab(6, 3) + wiatr_tab(7, 3)) / 2 - tab_pz(numer_etapu, 6)
  If kw > 180 Then
    If Sgn(kw) = -1 Then
      kw = 360 + kw
     Else
      kw = 360 - kw
    End If
  End If
  kz = ((wiatr_tab(6, 2) + wiatr_tab(7, 2)) / 2) * 60 / vr * Sin(kw)
  km = tab_pz(numer_etapu, 6) - kz
  wysokosc = kw
  numer_etapu = km


 Case 13000
  kw = wiatr_tab(7, 3) - tab_pz(numer_etapu, 6)
  If kw > 180 Then
    If Sgn(kw) = -1 Then
      kw = 360 + kw
     Else
      kw = 360 - kw
    End If
  End If
  kz = wiatr_tab(7, 2) * 60 / vr * Sin(kw)
  km = tab_pz(numer_etapu, 6) - kz
  wysokosc = kw
  numer_etapu = km
End Select
End Sub

Sub licz_a_d (b1 As Double, l1 As Double, b0 As Double, l0 As Double)
Dim wyn As Double
Dim rob As Double
Dim rob1 As Double

rob = zam_st_rad(b1 - b0)
rob1 = zam_st_rad(l1 - l0)

b1 = zam_st_rad(b1)
b0 = zam_st_rad(b0)
d1# = l1 - l0
d1# = zam_st_rad(d1#)
l1 = zam_st_rad(l1)
l0 = zam_st_rad(l0)
```

```
f1# = Atn((1 - e2) * Tan(b1))
f0# = Atn((1 - e2) * Tan(b0))

a# = Atn(Cos(f1#) * Sin(d1#) / ((Cos(f0#) * Sin(f1#)) - (Sin(f0#) * Cos(f1#) * Cos(d1#))))
wyn = a#

wyn = zam_rad_st(wyn)

If rob > 0 And rob1 > 0 Then
End If
If rob > 0 And rob1 < 0 Then
  If wyn < 0 Then
    wyn = wyn + 360
    Else
     wyn = wyn + 90
  End If
End If
If rob < 0 And rob1 > 0 Then
 wyn = 180 + wyn
End If
If rob < 0 And rob1 < 0 Then
 wyn = 180 + wyn
End If
 b1 = wyn

End Sub

Sub licz_a1 (wyn As Double, b1 As Double, l1 As Double, b0 As Double, l0 As Double)
'b1 = zam_st_rad(b1)
'b0 = zam_st_rad(b0)
'd1# = zam_st_rad(d1#)
'l1 = zam_st_rad(l1)
'l0 = zam_st_rad(l0)
Dim rob As Double
Dim rob1 As Double

rob = zam_st_rad(b1 - b0)
rob1 = zam_st_rad(l1 - l0)

b1 = zam_st_rad(b1)
b0 = zam_st_rad(b0)


wyn = Atn(Sin(rob1) / ((Cos(b0#) * Tan(b1#)) - (Sin(b0#) * Cos(rob1))))

rob = zam_rad_st(rob)
rob1 = zam_rad_st(rob1)
wyn = zam_rad_st(wyn)

If rob > 0 And rob1 > 0 Then

End If
If rob > 0 And rob1 < 0 Then
wyn = 360 + wyn
End If
If rob < 0 And rob1 > 0 Then
 wyn = 180 + wyn
End If
If rob < 0 And rob1 < 0 Then
```

```
wyn = 180 + wyn
End If

End Sub

Function ms_kmh (rob As Double) As Double
    ms_kmh = rob * 3.6

End Function

Sub multibeep (nbeeps As Integer)
 Dim i As Integer
  For i = 1 To nbeeps
   Beep
  Next i

End Sub

Function pred_ma_vr (ma As Double, hb As Double) As Double
Dim a As Double
Dim th As Double
th = t0 - (.0065 * hb)
a = (20 * Sqr(273.15 + th)) * 3.6
vr = ma * a

pred_ma_vr = vr


End Function

Function pred_Vp_Vr (vp As Double, map As Double, hb As Double) As Double
th = t0 - (.0065 * hb)
If map > 1 Then
  wysz_vr1 "t2411.tab", vp, hb, th
 Else
  wysz_vr2 "t2412.tab", vp, hb, th
End If
vr = vp
pred_Vp_Vr = vr

End Function


Function pred_vr_ma (vr As Double, hb As Double) As Double
Dim a As Double
Dim th As Double
th = t0 - (.0065 * hb)
a = (20 * Sqr(273.15 + th)) * 3.6
ma = vr / a

pred_vr_ma = ma


End Function

Function pred_Vr_Vp (vr As Double, hb As Double) As Double
Dim a As Double

th = t0 - (.0065 * hb)
a = 20 * Sqr(273.15 + th)
```

```
map = vr / a
If map < 1 Then
  wysz_vp1 "t2413.tab", vr, th
 Else
  wysz_vp2 "t2414.tab", vr, th
End If
vp = vr * 72.2 * Sqr(273.15 + th)
pred_Vr_Vp = vp

End Function

Sub RKDM () ' Rzeczywisty k1t drogi magnetycznej

Dim beja As Double
Dim beja1 As Double

If tab_pz(2, 7) > 1 Then
    For i = 1 To tab_pz(2, 7) - 1
      'obliczam k1ty pomiędzy punktami zwrotnymi
      b1# = tab_pz(i + 1, 9)
      l1# = tab_pz(i + 1, 10)
      b0# = tab_pz(i, 9)
      l0# = tab_pz(i, 10)
      licz_a_d b1#, l1#, b0#, l0#
      tab_pz(i, 6) = b1#
    Next i
End If

End Sub

Function wys_Hp_Hr (Hp As Double) As Double
 dHb = nb * (pl - pt)
 dht = (tempO - 15) / 3 * Hp / 100'tempO -temperatura otaczająca samolot
 wysz_dha "t242.tab", vp, Hp
 dha = vp


 'dHa wyszukaj z tablicy
 Hr = Hp + dha + dHb + dHter + dht
 wys_Hp_Hr = Hr

End Function

Function wys_Hr_Hp (Hr As Double) As Double
  'wartosc funkcji to Hp
  dHb = nb * (pl - pt)
  hb = Hr + dHter + dHb
 ' Th = T0 - Hb * .0065
 ' dH = 900 + 20 * (T0 + Th)

 'wyszukaj z tablicy dHa
  wysz_dha "t242.tab", vp, hb
  dha = vp

  wys_Hr_Hp = hb + dha


End Function
```

```
Sub wysz_qst276 (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double,
zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
   Do While (Not EOF(workingfilenum%) And calosc%)

      Get #workingfilenum%, ind&, recordvar

 b1% = True
 b2% = True
 b3% = True

       If recordvar.zm1 = zm1 Then
         b1% = False
        Else
         b1% = True
       End If

       If recordvar.zm2 >= zm2 Then
          b2% = False
        Else
         b2% = True
       End If

       If recordvar.zm3 <= zm3 Then
         b3% = False
        Else
         b3% = True
       End If



     If ind& <= lastrecord Then
         ind& = ind& + 1
     End If
     If Not (b1% Or b2% Or b3%) Then

        calosc% = False
     End If
   Loop

     zmwy = recordvar.zm5

Close workingfilenum%


End Sub
```

```
Sub zam_bl_na_xy (b As Double, l As Double)
      b# = pi# * (b# / 180#)
      a# = l# / 6#
      a# = a# - Int(a#)
      n = Int(l / 6) + 2
      nn = c / Sqr(1# + e2 * Cos(b) * Cos(b))
      fi# = pi# * ((a# - .5) / 30#)

      x = ((fi ^ 2) * nn / 4) * ((Cos(b) * Cos(b) - (1 / 6)) * (fi ^ 2) + 2)
      x = ((x + (k1 - e2 * Cos(b) * Cos(b)) * Cos(b) * Cos(b) - k2)) * Sin(b) * Cos(b)
      x = x + b * R
      x = x / 1000

      y = ((e2 * Cos(b) * Cos(b) + 2) * Cos(b) * Cos(b) - 1)
      y = y * ((fi ^ 2) / 6) + 1
      y = (y * fi * nn * Cos(b)) + (n - .5) * 10 ^ 6
      y = y / 1000

      b# = zam_rad_st(b#)

End Sub

Function zam_na_st (st As String) As Double
'zamiana na stopnie minuty sekundy

Dim tekst As String
Dim robs As String
Dim robm As String
Dim robc As String
Dim rob As Double
Dim m1 As Double 'miejsce minuty
Dim m2 As Double
Dim m3 As Double
Dim spr As Double


tekst = LTrim$(RTrim$(st))
rob = Len(tekst)

m3 = rob

If m3 > 0 Then
  m1 = InStr(1, tekst, "-")
  If m1 = 0 Then
   robc = Mid$(tekst, 1, m3)
   Else
    robc = Mid$(tekst, 1, m1 - 1)
    If m1 < m3 Then
      m2 = InStr(m1 + 1, tekst, "-")
      If m2 > m1 Then
         robm = Mid$(tekst, m1 + 1, m2 - m1 - 1)
        Else
         robm = Mid$(tekst, m1 + 1, m3 - m1)
      End If
      If (m1 < m2) And (m2 < m3) Then
        robs = Mid$(tekst, m2 + 1, m3 - m2)
      End If
    End If
  End If
```

```
 End If
spr = (Val(robm) * 60 / 3600 + (Val(robs) / 3600))
robm = Str(Val(robm) * 60 / 3600 + (Val(robs) / 3600))
If spr = 0 Then
  zam_na_st = Val(robc)
  Else
  zam_na_st = Val(robc) + Val(robm)
End If

End Function

Function zam_na_st (st As String) As Double
'zamiana na stopnie minuty sekundy

Dim tekst As String
Dim robs As String
Dim robm As String
Dim robc As String
Dim rob As Double
Dim m1 As Double 'miejsce minuty
Dim m2 As Double
Dim m3 As Double
Dim spr As Double


tekst = LTrim$(RTrim$(st))
rob = Len(tekst)

m3 = rob

If m3 > 0 Then
  m1 = InStr(1, tekst, "-")
  If m1 = 0 Then
   robc = Mid$(tekst, 1, m3)
   Else
    robc = Mid$(tekst, 1, m1 - 1)
    If m1 < m3 Then
      m2 = InStr(m1 + 1, tekst, "-")
      If m2 > m1 Then
        robm = Mid$(tekst, m1 + 1, m2 - m1 - 1)
       Else
        robm = Mid$(tekst, m1 + 1, m3 - m1)
      End If
      If (m1 < m2) And (m2 < m3) Then
       robs = Mid$(tekst, m2 + 1, m3 - m2)
      End If
    End If
  End If
 End If
spr = (Val(robm) * 60 / 3600 + (Val(robs) / 3600))
robm = Str(Val(robm) * 60 / 3600 + (Val(robs) / 3600))
If spr = 0 Then
  zam_na_st = Val(robc)
  Else
  zam_na_st = Val(robc) + Val(robm)
End If
End Function

Function zam_st_rad (st As Double) As Double
  zam_st_rad = st * pi / 180
```

```
End Function



MODUL2.BAS

Dim recordvar As recordtype
Dim recordrob As recordtype

Sub dziel_2dod (workingfilename1 As String)

Dim recordvar As recordtype
Dim recordrob As recordtype
Dim rob As Integer
Dim rob1 As Integer
Dim rob2 As Integer
Const c1 = 26
Const c2 = 23
Const c3 = 15
dodfilenum% = fileopener("~T2m3p7~.TMP", randomfile, Len(recordvar))

workingfilenum% = fileopener("~T1m3p7~.tmp", randomfile, Len(recordvar))

cleanfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))

rob1 = c1 + 1
For ind& = 1 To c2

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
 recordvar.zm3 = 240
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, ind&, recordvar
 rob1 = rob1 + 1
Next ind&

rob1 = c1 + c2 + 1
rob2 = c2 + 1
For ind& = c1 + 1 To c1 + c3

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
 recordvar.zm3 = 260
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, rob2, recordvar
 rob1 = rob1 + 1
 rob2 = rob2 + 1
Next ind&

'zapisanie kopii w  pliku workingfilenum

rob = LOF(cleanfilenum%) \ Len(recordvar)
```

```
 For ind& = 1 To rob
  Get #cleanfilenum%, ind&, recordvar
  Put #workingfilenum%, ind&, recordvar
 Next ind&

 'tworzenie koncowego pliku
 '1
 For ind& = 1 To c1
    Get #workingfilenum%, ind&, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
 Next ind&
 '2
  rob1 = 1
 For ind& = c1 + 1 To c1 + c2
    Get #dodfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
 Next ind&
 '3
 rob1 = c1 + 1
 For ind& = c1 + c2 + 1 To c1 + c2 + c2
    Get #workingfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
    Next ind&
 '4
 rob1 = c2 + 1
 For ind& = c1 + c2 + c2 + 1 To c1 + c2 + c2 + c3
    Get #dodfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
 Next ind&
 '5
 rob1 = c1 + c2 + 1
 For ind& = c1 + c2 + c2 + c3 + 1 To c1 + c2 + c2 + c3 + c3
    Get #workingfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
 Next ind&

 Close workingfilenum%
 Close cleanfilenum%
 Close #dodfilenum%
 Kill "~T2m3p7~.TMP"
 Kill "~t1m3p7~.tmp"

 End Sub

 Sub dziel_4dod (workingfilename1 As String)

 Dim recordvar As recordtype
 Dim recordrob As recordtype
 Dim rob As Integer
 Dim rob1 As Integer
 Dim rob2 As Integer
```

```
Const c1 = 13
Const c2 = 11
Const c3 = 11
Const c4 = 10
Const c5 = 9
dodfilenum% = fileopener("~T2m3p7~.TMP", randomfile, Len(recordvar))

workingfilenum% = fileopener("~T1m3p7~.tmp", randomfile, Len(recordvar))

cleanfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))

rob1 = c1 + 1
For ind& = 1 To c2

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
 recordvar.zm3 = 240
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, ind&, recordvar
 rob1 = rob1 + 1
Next ind&

rob1 = c1 + c2 + 1
rob2 = c2 + 1
For ind& = c1 + 1 To c1 + c3

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
 recordvar.zm3 = 260
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, rob2, recordvar
 rob1 = rob1 + 1
 rob2 = rob2 + 1
Next ind&

rob1 = c1 + c2 + c3 + 1
rob2 = c2 + c3 + 1
For ind& = c1 + c2 + 1 To c1 + c2 + c4

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
 recordvar.zm3 = 280
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, rob2, recordvar
 rob1 = rob1 + 1
 rob2 = rob2 + 1
Next ind&

rob1 = c1 + c2 + c3 + c4 + 1
rob2 = c2 + c3 + c4 + 1
For ind& = c1 + c2 + c3 + 1 To c1 + c2 + c3 + c5

 Get #cleanfilenum%, ind&, recordvar
 Get #cleanfilenum%, rob1, recordrob
```

```
 recordvar.zm3 = 300
 recordvar.zm6 = (recordrob.zm6 + recordvar.zm6) / 2
 recordvar.zm7 = (recordrob.zm7 + recordvar.zm7) / 2
 recordvar.zm8 = (recordrob.zm8 + recordvar.zm8) / 2
 Put #dodfilenum%, rob2, recordvar
 rob1 = rob1 + 1
 rob2 = rob2 + 1
Next ind&


'zapisanie kopii w  pliku workingfilenum
rob = LOF(cleanfilenum%) \ Len(recordvar)

For ind& = 1 To rob
 Get #cleanfilenum%, ind&, recordvar
 Put #workingfilenum%, ind&, recordvar
Next ind&

'tworzenie koncowego pliku
'1
For ind& = 1 To c1
   Get #workingfilenum%, ind&, recordvar
   recordvar.recordnum = ind&
   Put #cleanfilenum%, ind&, recordvar
Next ind&
'2
 rob1 = 1
For ind& = c1 + 1 To c1 + c2
   Get #dodfilenum%, rob1, recordvar
   recordvar.recordnum = ind&
   Put #cleanfilenum%, ind&, recordvar
   rob1 = rob1 + 1
Next ind&
'3
rob1 = c1 + 1
For ind& = c1 + c2 + 1 To c1 + c2 + c2
   Get #workingfilenum%, rob1, recordvar
   recordvar.recordnum = ind&
   Put #cleanfilenum%, ind&, recordvar
   rob1 = rob1 + 1
   Next ind&
'4
rob1 = c2 + 1
For ind& = c1 + c2 + c2 + 1 To c1 + c2 + c2 + c3
   Get #dodfilenum%, rob1, recordvar
   recordvar.recordnum = ind&
   Put #cleanfilenum%, ind&, recordvar
   rob1 = rob1 + 1
Next ind&
'5
rob1 = c1 + c2 + 1
For ind& = c1 + c2 + c2 + c3 + 1 To c1 + c2 + c2 + c3 + c3
   Get #workingfilenum%, rob1, recordvar
   recordvar.recordnum = ind&
   Put #cleanfilenum%, ind&, recordvar
   rob1 = rob1 + 1
Next ind&
'6
rob1 = c2 + c3 + 1
For ind& = c1 + c2 + c2 + c3 + c3 + 1 To c1 + c2 + c2 + c3 + c3 + c4
```

```
    Get #dodfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
  Next ind&
  '7
  rob1 = c1 + c2 + c3 + 1
  For ind& = c1 + c2 + c2 + c3 + c3 + c4 + 1 To c1 + c2 + c2 + c3 + c3 + c4 + c4
    Get #workingfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
  Next ind&
  '8
  rob1 = c2 + c3 + c4 + 1
  For ind& = c1 + c2 + c2 + c3 + c3 + c4 + c4 + 1 To c1 + c2 + c2 + c3 + c3 + c4 + c4 + c5
    Get #dodfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
  Next ind&
  '9
  rob1 = c1 + c2 + c3 + c4 + 1
  For ind& = c1 + c2 + c2 + c3 + c3 + c4 + c4 + c5 + 1 To c1 + c2 + c2 + c3 + c3 + c4 + c4 + c5 + c5
    Get #workingfilenum%, rob1, recordvar
    recordvar.recordnum = ind&
    Put #cleanfilenum%, ind&, recordvar
    rob1 = rob1 + 1
  Next ind&

  Close workingfilenum%
  Close cleanfilenum%
  Close #dodfilenum%
  Kill "~T2m3p7~.TMP"
  Kill "~t1m3p7~.tmp"
  End Sub
  Function fileerrors (errval As Integer) As Integer
  msgtype% = mb_exclaim
  Select Case errval
    Case err_deviceunavailable
      msg$ = "That device appears unavailable."
      msgtype% = mb_exclaim + 4
    Case err_disknotready
      msg$ = "insert a disk in drive and close door."
    Case err_deviceio
      msg$ = "internal disk error"
      msgtype% = mb_exclaim + 4
    Case err_diskfull
      msg$ = "disk is full.continue?"
      msgtype% = 35
    Case err_badfilename, err_badfilenameornumber
      msg$ = "that filename is illegal."
    Case err_pathdoesnotexist
      msg$ = "that path dosen't exist."
    Case err_badfilemode
      msg$ = "can't open your file for that type of acccess."
    Case err_filealreadyopen
      msg$ = "this file is already open."
    Case err_inputpastendoffile
      msg$ = "this file has a nonstandard end-of-file marker, "
```

```
    msg$ = msg$ + "or an attempt was made to read beyond "
    msg$ = msg$ + "the end-of-file marker."
  Case Else
    fileerrors = 3
    Exit Function
End Select

response% = MsgBox(msg$, msgtype%, "Disk error")
Select Case response%
  Case 1.4
    fileerrors = 0
  Case 5
    fileerrors = 1
  Case 2.3
    fileerrors = 2
  Case Else
    fileerrors = 3
End Select


End Function

Function fileopener (nametouse$, mode%, recordlen%) As Integer
filenum% = FreeFile
On Error GoTo openererror
Select Case mode
  Case replacefile
   Open nametouse For Output As filenum% Len = recordlen%
  Case readfile
   Open nametouse For Input As filenum% Len = recordlen%
  Case addtofile
   Open nametouse For Append As filenum% Len = recordlen%
  Case randomfile
   Open nametouse For Random As filenum% Len = recordlen%
  Case binaryfile
   Open nametouse For Binary As filenum% Len = recordlen%
  Case Else
   Exit Function
End Select
fileopener = filenum%
Exit Function
openererror:
  action% = fileerrors(Err)
  Select Case action%
    Case 0
     Resume
    Case Else
     fileopener = 0
     Exit Function
   End Select

End Function

Sub lacz (workingfilename1 As String, workingfilename2 As String)
Dim recordvar As recordtype
Dim rob As Integer

workingfilenum% = fileopener(workingfilename2, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)
```

```
cleanfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))
rob = LOF(cleanfilenum%) \ Len(recordvar)
If rob = 0 Then rob = 1

For ind& = 1 To lastrecord
 rob = rob + 1
 Get #workingfilenum, ind&, recordvar
  recordvar.recordnum = rob
 Put #cleanfilenum%, rob, recordvar

Next ind&

Close workingfilenum%
Close cleanfilenum%

End Sub

Sub odlacz (workingfilename1 As String, workingfilename2 As String)

Dim recordvar As recordtype
Dim rob As Integer

dodfilenum% = fileopener("~T2m3p7~.TMP", randomfile, Len(recordvar))

workingfilenum% = fileopener(workingfilename2, randomfile, Len(recordvar))
lastrecord = 64'LOF(workingfilenum%) \ Len(recordvar)

cleanfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))
rob = LOF(cleanfilenum%) \ Len(recordvar)

lastrecord = rob - lastrecord

For ind& = 1 To lastrecord
 Get #cleanfilenum%, ind&, recordvar
 Put #dodfilenum%, ind&, recordvar
Next ind&

'dodatkowa
'rob1& = 1
'For ind& = lastrecord + 1 To rob
 'Get #cleanfilenum%, ind&, recordvar
' recordvar.recordnum = rob1&
' Put #workingfilenum%, rob1&, recordvar
' rob1& = rob1& + 1
'Next ind&



Close cleanfilenum%
Kill workingfilename1

cleanfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))

For ind& = 1 To lastrecord
 Get #dodfilenum%, ind&, recordvar
 Put #cleanfilenum%, ind&, recordvar
Next ind&


Close workingfilenum%
```

```
Close cleanfilenum%
Close #dodfilenum%
Kill "~T2m3p7~.TMP"
End Sub


Sub szukaj_3zm (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm4
As Double, zm5 As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype
 b1% = True
 b2% = True
 b3% = True
 b4% = True
 b5% = True
 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

      If recordvar.zm1 = zm1 Then
        b1% = False
        indb1dol& = ind&
        indb1gor& = ind&
       ElseIf recordvar.zm1 < zm1 Then
        indb1dol& = ind&
        b1% = True
       ElseIf recordvar.zm1 > zm1 Then
        indb1gor& = ind&
        b1% = False
      End If

      If recordvar.zm2 = zm2 Then
        b2% = False
        indb2dol& = ind&
        indb2gor& = ind&
       ElseIf recordvar.zm2 < zm2 Then
        indb2dol& = ind&
        b2% = True
       ElseIf recordvar.zm2 > zm2 Then
        indb2gor& = ind&
        b2% = False
      End If

      If recordvar.zm3 = zm3 Then
        b3% = False
        indb3dol& = ind&
        indb3gor& = ind&
       ElseIf recordvar.zm3 < zm3 Then
        indb3dol& = ind&
        b3% = True
       ElseIf recordvar.zm3 > zm3 Then
        indb3gor& = ind&
        b3% = False
      End If
```

```
  If recordvar.zm4 = zm4 Then
    b4% = False
    indb4dol& = ind&
    indb4gor& = ind&
   ElseIf recordvar.zm4 < zm4 Then
    indb4dol& = ind&
    b4% = True
   ElseIf recordvar.zm4 > zm4 Then
    indb4gor& = ind&
    b4% = False
  End If

  If recordvar.zm5 = zm5 Then
    b5% = False
    indb5dol& = ind&
    indb5gor& = ind&
   ElseIf recordvar.zm5 < zm5 Then
    indb5dol& = ind&
    b5% = True
   ElseIf recordvar.zm5 > zm5 Then
    indb5gor& = ind&
    b5% = False
  End If


If ind& <= lastrecord Then
    ind& = ind& + 1
End If
If Not (b1% Or b2% Or b3% Or b4% Or b5%) Then

   calosc% = False
End If
    calosc% = False
  End If
 Loop

 If indb5dol& = indb5gor& Then
   Get #workingfilenum%, indb5gor&, recordvar
   zm1 = recordvar.zm6
   zm2 = recordvar.zm7
   zm3 = recordvar.zm8
  Else
   Get #workingfilenum%, indb5gor&, recordvar
   Get #workingfilenum%, indb5dol&, recordrob
   zm1 = (recordvar.zm6 + recordrob.zm6) / 2
   zm2 = (recordvar.zm7 + recordrob.zm7) / 2
   zm3 = (recordvar.zm8 + recordrob.zm8) / 2
 End If

Close workingfilenum%

End Sub


Sub usun_rekordy (workingfilename1 As String, ilosc_rec As Integer)

End Sub

Sub wysz_dlugotrwalosc (workingfilename As String, zm1 As Double, zm2 As Double, zmwy As
Double)
 Dim recordvar As recordtype
```

```
Dim recordrob As recordtype

b1% = False
b2% = False
b3% = False
b4% = False

calosc% = True

workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

b1% = True
b2% = True

       If recordvar.zm1 >= zm1 Then
         b1% = False
        Else
         b1% = True
       End If

       If recordvar.zm2 <= zm2 Then
          b2% = False
        Else
         b2% = True
       End If


     If ind& <= lastrecord Then
         ind& = ind& + 1
     End If
     If Not (b1% Or b2%) Then

        calosc% = False
     End If
   Loop

     zmwy = recordvar.zm3

Close workingfilenum%

End Sub

Sub wysz_lwzn (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm5 As
Double, zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False
 b4% = False

 calosc% = True
```

```
workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

b1% = True
b2% = True
b3% = True
b4% = True

       If recordvar.zm1 >= zm1 Then
         b1% = False
        Else
         b1% = True
       End If

       If recordvar.zm2 = zm2 Then
          b2% = False
        Else
         b2% = True
       End If

       If recordvar.zm3 <= zm3 Then
         b3% = False
        Else
         b3% = True
       End If

       If recordvar.zm5 >= zm5 Then
         b4% = False
        Else
         b4% = True
       End If



    If ind& <= lastrecord Then
        ind& = ind& + 1
    End If
    If Not (b1% Or b2% Or b3% Or b4%) Then

       calosc% = False
    End If
  Loop

    zmwy = recordvar.zm6

Close workingfilenum%



End Sub


Sub wysz_n2 (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zmwy As
Double)
 Dim recordvar As recordtype
```

```
Dim recordrob As recordtype

b1% = False
b2% = False
b3% = False
b4% = False

calosc% = True

workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

b1% = True
b2% = True
b3% = True


      If recordvar.zm1 <= zm1 Then
        b1% = False
       Else
        b1% = True
      End If

      If recordvar.zm2 >= zm2 Then
         b2% = False
       Else
        b2% = True
      End If

      If recordvar.zm3 >= zm3 Then
        b3% = False
       Else
        b3% = True
      End If



    If ind& <= lastrecord Then
        ind& = ind& + 1
    End If
    If Not (b1% Or b2% Or b3%) Then

       calosc% = False
    End If
  Loop

    zmwy = recordvar.zm5

Close workingfilenum%


End Sub
```

```
Sub wysz_pulap_praktyczny (workingfilename As String, zm1 As Double, zm2 As Double, zmwy As
Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False
 b4% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
   Do While (Not EOF(workingfilenum%) And calosc%)

      Get #workingfilenum%, ind&, recordvar

 b1% = True
 b2% = True

       If recordvar.zm1 >= zm1 Then
         b1% = False
        Else
         b1% = True
       End If

       If recordvar.zm2 <= zm2 Then
          b2% = False
        Else
          b2% = True
       End If


     If ind& <= lastrecord Then
         ind& = ind& + 1
     End If
     If Not (b1% Or b2%) Then

        calosc% = False
     End If
   Loop

     zmwy = recordvar.zm3

Close workingfilenum%


End Sub


Sub wysz_qk (workingfilename As String, zm1 As Double, zm2 As Double,zm3 as double, zmwy As
Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype
 '
 b1% = False
```

```
b2% = False
b3% = False
'
calosc% = True
'
workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)
'
ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)
     '
     Get #workingfilenum%, ind&, recordvar
'
b1% = True
b2% = True
b3% = True

'
       If recordvar.zm1 <= zm1 Then
         b1% = False
        Else
         b1% = True
       End If
'
       If recordvar.zm2 <= zm2 Then
          b2% = False
        Else
         b2% = True
       End If
'
       If recordvar.zm3 <= zm3 Then
         b3% = False
        Else
         b3% = True
       End If
'
'
     If ind& <= lastrecord Then
         ind& = ind& + 1
     End If
     If Not (b1% Or b2% Or b3%) Then
'
        calosc% = False
     End If
   Loop
'
     zmwy = recordvar.zm4
'
Close workingfilenum%

End Sub


Sub wysz_qs (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm5 As
Double, zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
```

```
b3% = False
b4% = False

calosc% = True

workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

b1% = True
b2% = True
b3% = True
b4% = True

       If recordvar.zm1 <= zm1 Then
         b1% = False
        Else
         b1% = True
       End If

       If recordvar.zm2 >= zm2 Then
          b2% = False
        Else
         b2% = True
       End If

       If recordvar.zm3 >= zm3 Then
         b3% = False
        Else
         b3% = True
       End If

       If recordvar.zm5 <= zm5 Then
         b4% = False
        Else
         b4% = True
       End If



     If ind& <= lastrecord Then
         ind& = ind& + 1
     End If
     If Not (b1% Or b2% Or b3% Or b4%) Then

        calosc% = False
     End If
   Loop

    zmwy = recordvar.zm6

Close workingfilenum%


End Sub
```

```
Sub wysz_Qwzn (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm5
As Double, zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False
 b4% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

 b1% = True
 b2% = True
 b3% = True
 b4% = True

      If recordvar.zm1 >= zm1 Then
        b1% = False
       Else
        b1% = True
      End If

     If recordvar.zm2 = zm2 Then
        b2% = False
       Else
        b2% = True
     End If

     If recordvar.zm3 <= zm3 Then
        b3% = False
       Else
        b3% = True
     End If

     If recordvar.zm5 >= zm5 Then
        b4% = False
       Else
        b4% = True
     End If



  If ind& <= lastrecord Then
      ind& = ind& + 1
  End If
  If Not (b1% Or b2% Or b3% Or b4%) Then

     calosc% = False
  End If
 Loop
```

```
    zmwy = recordvar.zm6

Close workingfilenum%


End Sub


Sub wysz_Qwznt264 (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double,
zmwy1 As Double, zmwy2 As Double, zmwy3 As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
   Do While (Not EOF(workingfilenum%) And calosc%)

      Get #workingfilenum%, ind&, recordvar

 b1% = True
 b2% = True
 b3% = True
 b4% = True
 b4% = True

      If recordvar.zm1 >= zm1 Then
        b1% = False
       Else
        b1% = True
      End If

      If recordvar.zm2 = zm2 Then
         b2% = False
       Else
        b2% = True
      End If

      If recordvar.zm3 = zm3 Then
        b3% = False
       Else
        b3% = True
      End If



   If ind& <= lastrecord Then
       ind& = ind& + 1
   End If
   If Not (b1% Or b2% Or b3%) Then

      calosc% = False
   End If
```

```
  Loop

    zmwy1 = recordvar.zm4
    zmwy2 = recordvar.zm5
    zmwy3 = recordvar.zm6


Close workingfilenum%


End Sub


Sub wysz_twzn (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm5 As
Double, zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False
 b4% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

    Get #workingfilenum%, ind&, recordvar

b1% = True
b2% = True
b3% = True
b4% = True

      If recordvar.zm1 >= zm1 Then
        b1% = False
       Else
        b1% = True
      End If

      If recordvar.zm2 = zm2 Then
         b2% = False
       Else
        b2% = True
      End If

      If recordvar.zm3 <= zm3 Then
        b3% = False
       Else
        b3% = True
      End If

      If recordvar.zm5 >= zm5 Then
        b4% = False
       Else
```

```
        b4% = True
      End If


    If ind& <= lastrecord Then
        ind& = ind& + 1
    End If
    If Not (b1% Or b2% Or b3% Or b4%) Then

       calosc% = False
    End If
  Loop

    zmwy = recordvar.zm6

Close workingfilenum%


End Sub

Sub wysz_wqk (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double, zm5 As
Double, zmwy As Double)
 Dim recordvar As recordtype
 Dim recordrob As recordtype

 b1% = False
 b2% = False
 b3% = False
 b4% = False

 calosc% = True

 workingfilenum% = fileopener(workingfilename$, randomfile, Len(recordvar))
 lastrecord = LOF(workingfilenum%) \ Len(recordvar)

 ind& = 1
  Do While (Not EOF(workingfilenum%) And calosc%)

     Get #workingfilenum%, ind&, recordvar

 b1% = True
 b2% = True
 b3% = True
 b4% = True

      If recordvar.zm1 >= zm1 Then
        b1% = False
       Else
        b1% = True
      End If

      If recordvar.zm2 >= zm2 Then
         b2% = False
       Else
        b2% = True
      End If

      If recordvar.zm3 >= zm3 Then
```

```
        b3% = False
       Else
        b3% = True
      End If

      If recordvar.zm5 >= zm5 Then
        b4% = False
       Else
        b4% = True
      End If



    If ind& <= lastrecord Then
       ind& = ind& + 1
    End If
    If Not (b1% Or b2% Or b3% Or b4%) Then

       calosc% = False
    End If
  Loop

    zmwy = recordvar.zm6

Close workingfilenum%


End Sub

Sub wysz_zm (workingfilename As String, zm1 As Double, zm2 As Double, zm3 As Double)
Dim recordvar As recordtype

b1% = -1

workingfilenum = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

ind& = 1
  Do While (Not EOF(workingfilenum) And b1%)
     Get #workingfilenum, ind&, recordvar

      If recordvar.zm1 = zm1 Then
        b1% = 0

       Else
          b1% = -1
      End If

    If ind& <= lastrecord Then
       ind& = ind& + 1
    End If

  Loop

zm2 = recordvar.zm2
zm3 = recordvar.zm3


Close workingfilenum%
```

```
End Sub


Sub zmien_zm (workingfilename1 As String)
Dim recordvar As recordtype
Dim recordrob As recordtype

workingfilenum% = fileopener(workingfilename1, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

For ind& = 1 To lastrecord
 Get #workingfilenum, ind&, recordvar
  recordrob.recordnum = recordvar.recordnum
  recordrob.zm1 = recordvar.zm1
  recordrob.zm2 = recordvar.zm2
  recordrob.zm3 = recordvar.zm3
  recordrob.zm4 = recordvar.zm4
  recordrob.zm5 = recordvar.zm5

  recordrob.zm6 = recordvar.zm7
  recordrob.zm7 = recordvar.zm8
  recordrob.zm8 = recordvar.zm6
 Put #workingfilenum, ind&, recordrob
Next ind&
Close workingfilenum%
END SUB


CZAS_DYZ.FRM

Dim qstr As Double
Dim qstr1 As Double
Dim qstr2 As Double
Dim tdyz As Double
Dim ch As Double
Dim ckmz As Double
Dim strefa As Integer
Dim poz As Integer
Dim poz1 As Integer
Dim poz2 As Integer
Dim n As Double
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
Dim r6 As Integer
Dim r7 As Integer
Dim r8 As Integer
Dim r9 As Integer
Dim r10 As Integer
Dim tmanr As Double
Dim b As Double
Dim nrob As Double
Dim ds As Double
Dim dwyks As Double
Dim t360 As Double
Dim uzb As Integer
Dim wysokosc As Integer
Dim rodzaj_paliwa As Double
```

```
Dim zmwy As Double
Dim zmwy1 As Double
Dim zmwy2 As Double
Dim zmwy3 As Double
Dim zakres As Integer
Dim lzn_pom As Double
Dim qzn_pom As Double
Dim ck As Double
Dim i As Double

Sub Command1_Click ()
 Dim beta As Double

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\tdyz_zb.txt" For Output As 1

  Write #1, tb$ + nl$


  fmt$ = "#,##0.00"

 strefa = 1
 t0 = 15
For uzb = 1 To 2 Step 1
  For Hb = 1000 To 5000 Step 1000
    For Vm = 500 To 900 Step 100
        For ds = 20 To 40 Step 20
          For rodzaj_paliwa = .755 To .855 Step .02

        wysokosc = Hb


If uzb = 1 Then
     cxs = 310
     mspst = 12187
End If

If uzb = 2 Then
    cxs = 280
    mspst = 11741
End If


' Rodzaj paliwa
 Qr = (4200 * rodzaj_paliwa) + (1500 * rodzaj_paliwa)
 Qro = Qr - (.071 * Qr)


 mspst = mspst + Qr
 Qpz = 20 * 7   ' 20kg/min * 7 min
 msst = mspst - Qpz

zakres = 1

If zakres = 1 Then
```

```
 If msst <= 14500 Then
    msst = 13000
  End If
 If msst > 14500 And msst <= 16500 Then
    msst = 15000
  End If
 If msst > 16500 Then
    msst = 18000
  End If
 If Hb < 200 Then
   Hb = 200
 End If
 If Hb > 13000 Then
   Hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


' wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

 dtsr = 10
 If dtsr > 5 And dtsr <= 15 Then
     wysz_Qwzn "e:\t2612.tab", msst, dtsr, cxs, Hb, zmwy
     Qwzn = zmwy
     'wysz_twzn "e:\t2622.tab", msst, dtsr, cxs, Hb, zmwy
    ' twzn = zmwy
     wysz_lwzn "e:\t2625.tab", msst, dtsr, cxs, Hb, zmwy
     lwzn = zmwy
  End If

  wysokosc = Hb  ' uwaga podstawiam *********

  qlad = 10 * 50
  Qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
  Qzn = 130 - (-Qzn)
  Qzn = Qzn + qlad

  lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
  lzn = 130 - (-lzn)

  'ck = 2.8
  'Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

  '********** obliczanie Ch zużycia godzinowego w locie poziomym
  ' przy danej prędkości Vr
t0 = 15
th = t0 - (.0065 * Hb)
qlp = Qro - Qpz - Qwzn - Qzn
mslsr = msst - Qwzn - Qzn - (1 / 2 * qlp)
```

```
wysz_wqk "e:\t273b.tab", mslsr, ma, Hb, cxs, Wqk
 If Wqk = 0 Then

   mar# = ma
   ma = .5
   wysz_wqk "e:\t273b.tab", mslsr, ma, Hb, cxs, Wqk
   ma = mar#
 End If

 wysz_n2 "e:\t274.tab", ma, Wqk, th, n2

 ma = .5

 wysz_qk "e:\t275.tab", ma, Wqk, Hb, ckmz

 ma = pred_vr_ma(Vm, Hb)
 If ma <= .5 Then
 End If
 If ma > .5 And ma <= .6 Then
    ckmz = ckmz * 1.3
 End If
 If ma > .6 And ma <= .7 Then
    ckmz = ckmz * 1.35
 End If
 If ma > .7 And ma <= .8 Then
    ckmz = ckmz * 1.5
 End If
 If ma > .8 Then
    ckmz = ckmz * 2
 End If



 wysz_qs "e:\t277.tab", th, ma, n2, Hb, qs
 ch = qs * 3600
 'qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną

' ************************************



   i = i + 1
   If strefa = 1 Then

      If i = 2 Or i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
      picture1.Print "i= "; Str$(i)
      End If


    '*******************
    qstr1 = 0
    qstr2 = 0
    If ds >= lwzn Then
       qstr1 = (ds - lwzn) * ckmz
```

```
 End If
 If ds >= lzn Then
    qstr2 = (ds - lzn) * ckmz
 End If

 qstr = qstr1 + qstr2


 tdyz = Qr - (.007 * Qr) - (140 + .05 * (Qr - 825) + 550 + (ch * .083) + 135 + Qwzn + Qzn + qstr)
 ch = ch / 60
 tdyz = tdyz / ch
'*********************



 End If

End If ' zakres 1

'*****************************************
'=========================================



'Zapisywanie do zbioru
  tdyz = Val(Format$(tdyz, fmt$))
  Vm = Val(Format$(Vm, fmt$))
  lzn = Val(Format$(lzn, fmt$))
  lwzn = Val(Format$(lwzn, fmt$))
  qstr = Val(Format$(qstr, fmt$))
  ckmz = Val(Format$(ckmz, fmt$))
  ch = Val(Format$(ch, fmt$))

  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(Hb) + tb$ + Str$(Vm) + tb$ +
Str$(rodzaj_paliwa) + tb$ + Str$(ds) + tb$ + Str$(tdyz) + tb$ + nl$


Next rodzaj_paliwa
Next ds
Next Vm
Next Hb
Next uzb
'Next strefa

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1

End Sub


Sub Command4_Click ()
 Dim beta As Double

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\tdyz1.txt" For Output As 1
```

```
 Write #1, tb$ + nl$
            'wariant uzbrojenia
 fmt$ = "#,##0.00"

strefa = 1
t0 = 15
For uzb = 1 To 2 Step 1
 For Hb = 1000 To 5000 Step 1000
   For Vm = 500 To 900 Step 100
       For ds = 20 To 40 Step 20
         For rodzaj_paliwa = .755 To .855 Step .02

         wysokosc = Hb



 If uzb = 1 Then
     cxs = 280
     mspst = 12071
 End If

 If uzb = 2 Then
    cxs = 250
    mspst = 11625
 End If


' Rodzaj paliwa
 Qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
 Qro = Qr - (.071 * Qr)


  mspst = mspst + Qr
  Qpz = 20 * 7   ' 20kg/min * 7 min
  msst = mspst - Qpz

zakres = 1

If zakres = 1 Then



 If msst <= 14500 Then
    msst = 13000
 End If
 If msst > 14500 And msst <= 16500 Then
    msst = 15000
 End If
 If msst > 16500 Then
    msst = 18000
 End If
 If Hb < 200 Then
   Hb = 200
 End If
 If Hb > 13000 Then
   Hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
```

```
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

 dtsr = 10
 If dtsr > 5 And dtsr <= 15 Then
      wysz_Qwzn "e:\t2612.tab", msst, dtsr, cxs, Hb, zmwy
      Qwzn = zmwy
      'wysz_twzn "e:\t2622.tab", msst, dtsr, cxs, Hb, zmwy
     ' twzn = zmwy
      wysz_lwzn "e:\t2625.tab", msst, dtsr, cxs, Hb, zmwy
      lwzn = zmwy
  End If

  wysokosc = Hb  ' uwaga podstawiam *********

  qlad = 10 * 50
  Qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
  Qzn = 130 - (-Qzn)
  Qzn = Qzn + qlad

  lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
  lzn = 130 - (-lzn)

    'ck = 2.8
    'Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

    '********** obliczanie Ch zużycia godzinowego w locie poziomym
    ' przy danej prędkości Vr
 t0 = 15
 th = t0 - (.0065 * Hb)
 qlp = Qro - Qpz - Qwzn - Qzn
 mslsr = msst - Qwzn - Qzn - (1 / 2 * qlp)



wysz_wqk "e:\t273b.tab", mslsr, ma, Hb, cxs, Wqk
 If Wqk = 0 Then

   mar# = ma
   ma = .5
   wysz_wqk "e:\t273b.tab", mslsr, ma, Hb, cxs, Wqk
   ma = mar#
 End If

 wysz_n2 "e:\t274.tab", ma, Wqk, th, n2

 ma = .5

 wysz_qk "e:\t275.tab", ma, Wqk, Hb, ckmz
```

```
ma = pred_vr_ma(Vm, Hb)
If ma <= .5 Then
End If
If ma > .5 And ma <= .6 Then
  ckmz = ckmz * 1.3
End If
If ma > .6 And ma <= .7 Then
  ckmz = ckmz * 1.35
End If
If ma > .7 And ma <= .8 Then
  ckmz = ckmz * 1.5
End If
If ma > .8 Then
  ckmz = ckmz * 2
End If



wysz_qs "e:\t277.tab", th, ma, n2, Hb, qs
ch = qs * 3600
'qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną

' ************************************


  i = i + 1
  If strefa = 1 Then

    If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
    picture1.Print "i= "; Str$(i)
    End If


  '*******************
  qstr1 = 0
  qstr2 = 0
  If ds >= lwzn Then
     qstr1 = (ds - lwzn) * ckmz
  End If
  If ds >= lzn Then
     qstr2 = (ds - lzn) * ckmz
   End If

   qstr = qstr1 + qstr2


   tdyz = Qr - (.007 * Qr) - (140 + .05 * (Qr - 825) + 550 + (ch * .083) + 135 + Qwzn + Qzn + qstr)
   ch = ch / 60
   tdyz = tdyz / ch
  '*********************



 End If

End If ' zakres 1
```

```
'****************************************
'****************************************


'Zapisywanie do zbioru
  tdyz = Val(Format$(tdyz, fmt$))
  Vm = Val(Format$(Vm, fmt$))
  lzn = Val(Format$(lzn, fmt$))
  lwzn = Val(Format$(lwzn, fmt$))
  qstr = Val(Format$(qstr, fmt$))
  ckmz = Val(Format$(ckmz, fmt$))
  ch = Val(Format$(ch, fmt$))

  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(Hb) + tb$ + Str$(Vm) + tb$ +
Str$(rodzaj_paliwa) + tb$ + Str$(ds) + tb$ + Str$(tdyz) + tb$ + nl$


Next rodzaj_paliwa
Next ds
Next Vm
Next Hb
Next uzb
'Next strefa

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1



End Sub
```

CZASY.FRM

```
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
Dim r6 As Integer


Sub Command1_Click ()
If r1 And r2 And r3 And r4 And r5 And r6 Then

  'Wqk = 29
  'n2 = 84.2



  mousepointer = 11
  Unload wpr_dan1
  mouseponter = 0
End If

End Sub

Sub Command2_Click ()
```

```
mousepointer = 11
Unload wpr_dan1
mousepointer = 0

End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
End Sub

Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r1 = True
    T0 = Val(text1.Text)
    text2.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then

  'If KeyAscii <> Asc(".") Then
    'Beep
  ' KeyAscii = 0
  'End If

 End If

End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r2 = True
    dHter = Val(text2.Text)
    text3.SetFocus


  ElseIf KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
   'If KeyAscii <> Asc(".") Then
   ' Beep
   ' KeyAscii = 0
   'End If
 End If

End Sub

Sub Text3_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r3 = True
    zapas_nawigacyjny = Val(text3.Text)
    text4.SetFocus

  ElseIf KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
  ' If KeyAscii <> Asc(".") Then
    'Beep
```

```
  ' KeyAscii = 0
  'End If
 End If

End Sub

Sub Text4_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r4 = True
    zapas_techniczny = Val(text4.Text)
    text5.SetFocus

  ElseIf KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
   'If KeyAscii <> Asc(".") Then
   ' Beep
    "KeyAscii = 0
   'End If
 End If


End Sub

Sub Text5_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r5 = True
    tz = Val(text5.Text)
    text6.SetFocus

  ElseIf KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
   'If KeyAscii <> Asc(".") Then
   ' Beep
   ' KeyAscii = 0
   'End If
 End If


End Sub

Sub Text6_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r6 = True
    tlad = Val(text6.Text)
    text1.SetFocus

  ElseIf KeyAscii < Asc("0") Or KeyAscii > Asc("9") Then
  ' If KeyAscii <> Asc(".") Then
   ' Beep
   ' KeyAscii = 0
   'End If
 End If


End Sub


EDIT.FRM
```

```
Function checkemout () As Integer
Dim robvar As recordtype

For ind% = 0 To numboxes% - 1
  If fieldboxes(ind%).Text <> "" Then
   currentcontents$ = LTrim$(RTrim$(fieldboxes(ind%).Text))
   priorcontents$ = LTrim$(RTrim$(oldcontents(ind%)))
  If currentcontents$ = priorcontents$ Then sametext% = sametext% + 1

  Else
   emptyboxes = emptyboxes + 1
  End If
Next ind%
If emptyboxes = numboxes% Then checkemout = 0: Exit Function

If sametext% <> numboxes% Then
   msg$ = "Czy chciałbyś zapisać ten rekord teraz ? "
   answer% = MsgBox(msg$, 52, "Zapisać teraz ? ")

   If answer% = 6 Then
      bool% = False
      If position = 0 Then
         position = 1
         lastrecord = 1
         bool% = True
      End If

      recordvar.zm1 = .5 'Val(fieldboxes(0).Text)
      recordvar.zm2 = Val(fieldboxes(1).Text)
      recordvar.zm3 = Val(fieldboxes(2).Text)
      recordvar.zm4 = Val(fieldboxes(3).Text) * 14 / 153
      recordvar.zm5 = 0 'Val(fieldboxes(4).Text)' * 100 / 73
      recordvar.zm6 = 0 'Val(fieldboxes(5).Text) * 200 / 88
      recordvar.zm7 = 0   'Val(fieldboxes(6).Text) * 80 /  179
      recordvar.zm8 = 0   'Val(fieldboxes(7).Text) * 200 / 115


If newrecordflag Then
 If position <> lastrecord Then
   workingfile% = fileopener("pomoc1", randomfile, Len(recordvar))
   For ind% = position To lastrecord
      Get #workingfilenum%, ind%, robvar
      Put #workingfile%, ind%, robvar
   Next ind%

   recordvar.recordnum = position + 1
   Put #workingfilenum%, position + 1, recordvar

   For ind% = position + 1 To lastrecord
      Get #workingfile%, ind%, robvar
      robvar.recordnum = ind% + 1
      Put #workingfilenum, ind% + 1, robvar
   Next ind%

   If Not (bool%) Then
     lastrecord = lastrecord + 1
     position = position + 1
     bool% = False
   End If
     newrecordflag = False
```

```
        Close workingfile%
        Kill "pomoc1"
      Else
        If Not (bool%) Then
          lastrecord = lastrecord + 1
          position = position + 1
          bool% = False
        End If
        recordvar.recordnum = lastrecord
        Put #workingfilenum%, lastrecord, recordvar
        newrecordflag = False
      End If

     Else
        recordvar.recordnum = recordnumber
        Put #workingfilenum%, recordnumber, recordvar
     End If
     showrecord
     checkemout = 1
    Else
     checkemout = 0
    End If
End If

End Function


Sub cleanupfile (newfilename As String)

cleanfilenum% = fileopener("~T2m3p7~.TMP", randomfile, Len(recordvar))

For ind& = 1 To lastrecord
 Get #workingfilenum, ind&, recordvar
 Put #cleanfilenum%, ind&, recordvar
Next ind&

Close workingfilenum%
Close cleanfilenum%
If tempfileflag Or (UCase$(workingfilename) <> UCase$(newfilename$)) Then
   result% = copyfile("~T2m3p7~.TMP", newfilename$, randomfile)
   Kill "~T2m3p7~.TMP"
 Else
 Kill workingfilename
 Name "~t2m3p7~.tmp" As workingfilename
End If
End Sub

Sub clearfields ()
fieldboxes(0).Text = ""
fieldboxes(1).Text = ""
fieldboxes(2).Text = ""
fieldboxes(3).Text = ""
fieldboxes(4).Text = ""
fieldboxes(5).Text = ""
fieldboxes(6).Text = ""
fieldboxes(7).Text = ""
fieldboxes(8).Text = ""

End Sub
```

```
Sub Command1_Click ()
result = checkemout()
clearfields
newrecordflag = True
fieldboxes(4).SetFocus

End Sub

Function confirmfile (thename As String, operation As Integer) As Integer

nl$ = Chr$(13) + Chr$(10)
On Error GoTo confirmfileerror
thefile$ = Dir$(thename)
On Error GoTo 0

If thefile$ <> "" And operation = replacefile Then
  msg$ = "the file" + thenames$ + "already exists on disk."
  confirmation% = MsgBox(msg$, 65, "file message")
 ElseIf thefile$ = "" And operation = readfile Then
  msg$ = "the file " + thename + "dosen't exist."
  confirmation% = MsgBox(msg$, 65, "file message")
 ElseIf thefile$ = "" Then
  If operation = randomfile Or operation = binaryfile Then
    confirmation% = 2
  End If
End If
If confirmation% > 1 Then confrimfile = 0 Else confirmfile = 1
  If confirmation% = 1 Then
     If operation = loadfile Then
       operation = replacefile
     End If
  End If
Exit Function
confirmfileerror:
action% = fileerrors(Err)
Select Case action%
 Case 0
  Resume
 Case 1
  Resume Next
 Case 2
   Exit Function
 Case Else
 Error Err
End Select



End Function

Function copyfile (oldname$, newname$, filetype%) As Integer
Dim recvar As recordtype
recordlen% = Len(recvar)

If oldname$ = "" Or newname$ = "" Or recordlen% = 0 Then Exit Function

On Error GoTo copyerror

oldnum% = fileopener(oldname$, filetype%, recordlen%)
```

```
 newnum% = fileopener(newname$, filetype%, recordlen%)

 If oldnum% <> 0 And newnum% <> 0 Then

     For ind% = 1 To LOF(oldnum%) \ recordlen%
      Get #oldnum%, ind%, recvar
      Put #newnum%, ind%, recvar
     Next ind%

End If
 Close oldnum%
 Close newnum%

 copyfile = True
Exit Function
copyerror:
  action% = fileerrors(Err)
  Select Case action%
    Case 0
     Resume
    Case 1, 2
     copyfile = False
     Exit Function
    Case Else
     Error Err
  End Select
End Function

Function fileerrors (errval As Integer) As Integer
msgtype% = mb_exclaim
Select Case errval
  Case err_deviceunavailable
    msg$ = "That device appears unavailable."
    msgtype% = mb_exclaim + 4
  Case err_disknotready
    msg$ = "insert a disk in drive and close door."
  Case err_deviceio
    msg$ = "internal disk error"
    msgtype% = mb_exclaim + 4
  Case err_diskfull
    msg$ = "disk is full.continue?"
    msgtype% = 35
  Case err_badfilename, err_badfilenameornumber
    msg$ = "that filename is illegal."
  Case err_pathdoesnotexist
    msg$ = "that path dosen't exist."
  Case err_badfilemode
    msg$ = "can't open your file for that type of acccess."
  Case err_filealreadyopen
    msg$ = "this file is already open."
  Case err_inputpastendoffile
    msg$ = "this file has a nonstandard end-of-file marker, "
    msg$ = msg$ + "or an attempt was made to read beyond "
    msg$ = msg$ + "the end-of-file marker."
  Case Else
    fileerrors = 3
    Exit Function
End Select

response% = MsgBox(msg$, msgtype%, "Disk error")
```

```
Select Case response%
  Case 1.4
    fileerrors = 0
  Case 5
    fileerrors = 1
  Case 2.3
    fileerrors = 2
  Case Else
    fileerrors = 3
End Select


End Function


Function fileopener (nametouse$, mode%, recordlen%) As Integer
filenum% = FreeFile
On Error GoTo openererror
Select Case mode
  Case replacefile
   Open nametouse For Output As filenum% Len = recordlen%
  Case readfile
   Open nametouse For Input As filenum% Len = recordlen%
  Case addtofile
   Open nametouse For Append As filenum% Len = recordlen%
  Case randomfile
   Open nametouse For Random As filenum% Len = recordlen%
  Case binaryfile
   Open nametouse For Binary As filenum% Len = recordlen%
  Case Else
   Exit Function
End Select
fileopener = filenum%
Exit Function
openererror:
  action% = fileerrors(Err)
  Select Case action%
    Case 0
     Resume
    Case Else
     fileopener = 0
     Exit Function
   End Select

End Function

Function fileopener (nametouse$, mode%, recordlen%) As Integer
filenum% = FreeFile
On Error GoTo openererror
Select Case mode
  Case replacefile
   Open nametouse For Output As filenum% Len = recordlen%
  Case readfile
   Open nametouse For Input As filenum% Len = recordlen%
  Case addtofile
   Open nametouse For Append As filenum% Len = recordlen%
  Case randomfile
   Open nametouse For Random As filenum% Len = recordlen%
  Case binaryfile
   Open nametouse For Binary As filenum% Len = recordlen%
```

```
  Case Else
   Exit Function
End Select
fileopener = filenum%
Exit Function
openererror:
  action% = fileerrors(Err)
  Select Case action%
    Case 0
     Resume
    Case Else
     fileopener = 0
     Exit Function
   End Select

End Function

Sub scrollerupdate ()
If lastrecord <> 0 Then
  hscroller.Max = lastrecord
  hscroller.Min = 1
  hscroller.SmallChange = 1
  hscroller.LargeChange = Int((lastrecord \ 10) + 1)
  If hscroller.Value > lastrecord Then hscroller.Value = lastrecord
 End If

End Sub

Sub showrecord ()
If lastrecord > 0 Then
   b1% = False
  If position = 0 Then
    position = 1
    b1% = True
  End If
  recordnumber = position
  If b1% Then
    position = 0
  End If
  Get workingfilenum, recordnumber, recordvar
  fieldboxes(8).Text = Str$(recordvar.recordnum)
  fieldboxes(0).Text = Str$(recordvar.zm1)
  fieldboxes(1).Text = Str$(recordvar.zm2)
  fieldboxes(2).Text = Str$(recordvar.zm3)
  fieldboxes(3).Text = Str$(recordvar.zm4)
  fieldboxes(4).Text = Str$(recordvar.zm5)
  fieldboxes(5).Text = Str$(recordvar.zm6)
  fieldboxes(6).Text = Str$(recordvar.zm7)
  fieldboxes(7).Text = Str$(recordvar.zm8)

  oldcontents(0) = fieldboxes(0).Text
  oldcontents(1) = fieldboxes(1).Text
  oldcontents(2) = fieldboxes(2).Text
  oldcontents(3) = fieldboxes(3).Text
  oldcontents(4) = fieldboxes(4).Text
  oldcontents(5) = fieldboxes(5).Text
  oldcontents(6) = fieldboxes(6).Text
  oldcontents(7) = fieldboxes(7).Text

Else
```

```
 clearfields
End If

End Sub

Function writequery (newfilename As String) As Integer
msg$ = "Czy chcesz dołączyć te rekordy do pliku ?"
If MsgBox(msg$, 65, "Zapisać te rekordy ?") = 1 Then

 getname "Zapisz jako:"
 newfilename$ = workingfilename
 If newfilename$ = "" Then writequery = False: Exit Function
  If confirmfile(newfilename$, randomfile) = 0 Then
   writequery = True
   Else
    msg$ = "Stary plik " + newfilename$ + " zostanie ponownie zapisany! "
    If MsgBox(msg$, 49, "Zapisanie starego pliku ") = 1 Then
     writequery = True
     End If
    End If
   Else
    writequery = False
  End If

End Function

Sub addrecord_Click ()
result = checkemout()
clearfields
newrecordflag = True
fieldboxes(1).SetFocus

End Sub

Sub Aktual_Click ()
result = checkemout()
newrecordflag = False
fieldboxes(2).SetFocus

End Sub

Sub deleterecord_Click ()
Dim tempvar As recordtype
If position = lastrecord And lastrecord = 1 Then
 msg$ = "To jest ostatni rekord w pliku.Kasowanie zniszczy"
 msg$ = msg$ + " całkowicie plik."
 msg$ = msg$ + " Edytor pliku zostanie także zmkniety."
 msg$ = msg$ + " Wybierz OK aby zniszczyć plik"
 If MsgBox(msg$, 65, "Kasowanie pliku !") = 1 Then
  Close
  workingfilenum = 0
  tempfileflag = 0
  Kill workingfilename
  workingfilename = ""
  clearfields
End If
End
End If
For ind% = position To lastrecord - 1
 Get #workingfilenum, ind% + 1, tempvar
```

```
  tempvar.recordnum = ind%
  Put #workingfilenum, ind%, tempvar
 Next ind%
 lastrecord = lastrecord - 1
 showrecord

End Sub


Sub exitbutton_Click ()
recordwasstored% = checkemout()
If tempfileflag = True Then
 If writequery(newfilename$) = True Then
  writeit% = True
 Else
  Close
   Kill workingfilename
   writeit% = False
 End If
Else
 If writequery(newfilename$) = True Then
  writeit% = True
 Else
  If bakname <> "" Then
   Close
    Kill workingfilename
    result% = copyfile(bakname, workingfilename, randomfile)
    End If
   End If
  End If
  If writeit% = True Then
   cleanupfile (newfilename$)
  End If
   Close
position = 0
newrecordflag = False
recordnumber = 0
mousepointer = 11
Unload editor


End Sub

Sub exitbutton_Click ()
recordwasstored% = checkemout()
If tempfileflag = True Then
 If writequery(newfilename$) = True Then
  writeit% = True
 Else
  Close
   Kill workingfilename
   writeit% = False
 End If
 Else
 If writequery(newfilename$) = True Then
  writeit% = True
  Else
   If bakname <> "" Then
    Close
     Kill workingfilename
```

```
    result% = copyfile(bakname, workingfilename, randomfile)
    End If
   End If
  End If
  If writeit% = True Then
   cleanupfile (newfilename$)
  End If
   Close
position = 0
newrecordflag = False
recordnumber = 0
mousepointer = 11
Unload editor


End Sub

Sub Form_Load ()
'currentx = 100: currenty = 100
editor.Caption = "EDYTOR PLIKÓW"
'boxcaption$ = "UŻYWAJ " + edit.Caption
'nl$ = Chr$(13) + Chr$(10)

'msg$ = "Jeśli chcesz utworzyć nowy plik, wybierz klawisz Dobrze, "
'msg$ = msg$ + " później wybierz opcję dołączania rekordu, aby dodać nowy rekord." + nl$
'msg$ = msg$ + nl$ + "Aby załadować plik już istniejący"
'msg$ = msg$ + " na dysku," + nl$
'msg$ = msg$ + "wybierz opcję otwierania pliku i nazwę typu"
'msg$ = msg$ + " pliku, jaki chcesz otworzyć."
'MsgBox msg$, 64, boxcaption$

workingfilename = "~Tmp" + Right$(Time$, 2) + Left$(Time$, 2) + "."
workingfilename = workingfilename + Right$(Time$, 2) + Right$(times$, 1)
If confirmfile(workingfilename, randomfile) Then
  msg$ = "TEMP.plik" + workingfilename + "został odszukany. Wybierz przycisk Dobrze aby
skasować "
  msg$ = msg$ + "bieżącą zawartość, lub wybierz przycisk Opuść jeśli chcesz go załadować."
  If MsgBox(msg$, 33, "Stary plik tymczasowy został odnaleziony") = 1 Then
    Kill workingfilename
  End If
End If
workingfilenum = fileopener(workingfilename$, randomfile, Len(recordvar))
lastrecord = LOF(workingfilenum%) \ Len(recordvar)

If lastrecord = 0 Then
 newrecordflag = True
 Else
 recordnumber = 1
 position = 1
 showrecord
End If
tempfileflag% = True

 hscroller.Value = recordnumber
End Sub

Sub Form_Activate ()
openfile.SetFocus
End Sub
```

```
Sub hscroller_change ()
scrollerupdate
recordstored% = checkemout()
position = hscroller.Value
showrecord

End Sub

Sub nextrecord_Click ()
If lastrecord <> 1 Then
  recordwasstored% = checkemout()
End If
If position < lastrecord Then
  position = position + 1
  showrecord
 ElseIf position = lastrecord Then
   boxrob$ = "Następny rekord"
   msg$ = "To jest ostatni rekord w pliku. Wybierz opcję dołączania "
   msg$ = msg$ + "rekordów jeśli chcesz dołączyć nowy rekord teraz."
   MsgBox msg$, 0, boxrob$
 End If
 If newrecordflag Then newrecordflag = False
 scrollerupdate
 hscroller.Value = recordnumber



End Sub


Sub openfile_Click ()

 If lastrecord > 1 Or checkemout() Then
    If writequery(newfilename$) = True Then
     cleanupfile (newfilename$)
    End If
 End If
 getname "Proszę wprowadź nazwę pliku, który chcesz otworzyć: "
 thename$ = workingfilename
 If thename$ = "" Then Exit Sub
 result% = 1
 If confirmfile(thename$, randomfile) = False Then
   msg$ = "Nie znalazłem pliku  " + thename$ + "."
   msg$ = msg$ + " Czy chcesz utworzyć plik  " + thename$ + " ?"
   result% = MsgBox(msg$, 65, "Plik nie został znaleziony ")
 End If
 If result% = 1 Then
   period% = InStr(1, thename$, ".")
   If period% Then
      bakname = Left$(thename$, period%) + "bak"
      Else
      bakname = thename$ + ".bak"
   End If
 If thename$ = "" Or bakname$ = "" Then Exit Sub

 result% = copyfile(thename$, bakname$, randomfile)

 If result% <> True Then
   bakname = ""
```

```
  MsgBox ("Nie mogę utworzyć pliku z rozszerzeniem .bak ")
End If
filenum% = fileopener(thename$, randomfile, Len(recordvar))
If filenum% Then
   workingfilenum = filenum%
   workingfilename = thename$
   recordnumber = 1
   position = 0
   lastrecord = LOF(workingfilenum) \ Len(recordvar)

   showrecord
   tempfileflag = False
 End If
End If
editor.Caption = "EDYTOR PLIKÓW: " + workingfilename


End Sub

Sub previousrecord_Click ()
answer% = checkemout()
If position > 1 Then
   position = position - 1
   showrecord

ElseIf position = 1 Then
   boxrob$ = "Poprzedni rekord"
   msg$ = "To jest pierwszy rekord w pliku. Wybierz opcję następny "
   msg$ = msg$ + "rekord jeśli chcesz obejrzeć inne rekordy teraz."
   MsgBox msg$, 0, boxrob$
End If
If newrecordflag Then newrecordflag = False
scrollerupdate
hscroller.Value = recordnumber


End Sub
```

ETAPY.FRM

```
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
Dim r6 As Integer
Dim k As Integer

Sub Command1_Click ()
mousepointer = 11
Unload etapy
mousepointer = 0

End Sub

Sub Command2_Click ()
mousepointer = 11
```

```
Unload etapy
mousepointer = 0

End Sub

Sub Command3_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";
mousepointer = 11
Load start
mousepointer = 0
start.Show

End Sub

Sub Command4_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";

End Sub

Sub Command5_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";
End Sub

Sub Command6_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";

mousepointer = 11
Load lot_poz
mousepointer = 0
lot_poz.Show

End Sub

Sub Command7_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";

End Sub

Sub Command8_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";


End Sub

Sub Command9_Click ()
iw = iw + 1
etapy.picture1.Print " Etap trasy numer "; Str$(numer_etapu); " : ";
etapy.picture1.Print " Odcinek numer "; Str$(iw); " : ";
```

```
End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
iw = 0
picture1.Cls

End Sub

Sub Form_Activate ()
text1.SetFocus

End Sub

Sub Picture1_Click ()
Const ver = 200
Const hor = 500
picture1.scalewidth = hor
picture1.Line (40, 60)-(0, 100)

End Sub

Sub Text1_KeyPress (keyascii As Integer)
 If keyascii = 13 Then
   numer_etapu = Val(text1.text)
   picture1.Cls
   iw = 0
  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
   multibeep 10
   keyascii = 0
 End If


End Sub


FIGURY.FRM

Dim poz As Integer
Sub Command1_Click ()
mousepointer = 11
Unload figury
mousepointer = 0
End Sub

Sub Command2_Click ()
mousepointer = 11
Unload figury
mousepointer = 0
End Sub
Sub Form_Activate ()
poz = 0
label(0).BackColor = &H808000
text1.Text = label(poz).Tag
```

```
End Sub

Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub
```

GLOWNA.FRM

```
Sub Command1_Click ()

ruler.Min = 0
ruler.Max = 60
'ruler.value = 0
timer1.Interval = 1000
timer1.Enabled = True

 'picture3.Cls
 'picture3.Print "  Dane: "
 'picture3.Print "Hb= "; Str$(Hb); "[m]"
 'picture3.Print "Ma= "; Str$(Ma)
 'picture3.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
 'picture3.Print "Cx.s.= "; Str$(Cxs)
 'picture3.Print "TH = "; Str$(TH); "[Stopnie Celsiusza]"
 'picture3.Print " Odpowiedź : "
 'picture3.Print "Wqk= "; Str$(Wqk)
 'picture3.Print "n2= "; Str$(n2); "[%]"

'picture3.Cls
'picture3.Print " droga_lotu ="; Str$(droga_lotu / 1000); "[km]"
'zm1# = 12000
'zm2# = 3000
'zm3# = 230
'zm4# = 0
'zm5# = 1.4

'szukaj_3zm "t2921.tab", zm1#, zm2#, zm3#, zm4#, zm5#

'lacz "t277.tab", "t2771.tab"
'lacz "t277.tab", "t2772.tab"
'lacz "t2951.tab", "t2954.tab"

 'odlacz "t2957.tab", "t29514.tab"
' odlacz "t2951.tab", "t2953.tab"
 'odlacz "t2951.tab", "t2952.tab"

   'zmien_zm "t2922.tab"
  ' zmien_zm "t2924.tab"
  ' zmien_zm "t2923.tab"
```

```
  'dziel_4dod "t29121.tab"

'picture3.Print "q= "; Str$(zm1#)
'picture3.Print "L= "; Str$(zm2#)
'picture3.Print "t= "; Str$(zm3#)
picture3.Print "Cxs= "; Str$(Cxs)
picture3.Print "Mspst= "; Str$(Mspst)
picture3.Print "Qr= "; Str$(Qr)
'masa przedstartowa
picture3.Print "  Masa przedstartowa: "
picture3.Print "Mspst=Qr+Msu+Mzp= "; Str$(Mspst + Qr)

'masa startowa
' picture3.Print "  Masa startowa: "
'  Qpz = qz * tz
  ' Msst = Mspst - Qpz
' picture3.Print "Msst=Mspst-Qpz= "; Str$(Msst - Qpz)

'picture3.Cls
'For i = 1 To 8
  ' picture3.Print wiatr_tab(i, 1); wiatr_tab(i, 2); wiatr_tab(i, 3)
' Next i

'z1# = 350
'z3# = 15000
'z4# = 17000
'wysz_dha "t242.tab", z1#, z2#
'picture3.Print "dha= "; Str$(z1#)

End Sub

Sub edytor_Click ()
mousepointer = 11
mousepointer = 0
End Sub

Sub Command10_Click ()
mousepointer = 11
Load zbiorki
mousepointer = 0
zbiorki.Show

End Sub

Sub Command11_Click ()
mousepointer = 11
Load start
mousepointer = 0
start.Show


End Sub

Sub Command12_Click ()
mousepointer = 11
Load figury
mousepointer = 0
figury.Show
```

```
End Sub

Sub Command13_Click ()
mouseponter = 11
Load obcy
mousepointer = 0
obcy.Show


End Sub

Sub Command15_Click ()
mousepointer = 11
Load rozpusz
mousepointer = 0
rozpusz.Show

End Sub

Sub Command18_Click ()
mouseponter = 11
Load haslo
mousepointer = 0
haslo.Show

End Sub

Sub Command2_Click ()
ruler.Value = 0
timer1.Enabled = False
End Sub

Sub Command3_Click ()
mouseponter = 11
Load wpr_dan1
mousepointer = 0
wpr_dan1.Show

End Sub

Sub Command4_Click ()
mousepointer = 11
Load wpr_dan2
mousepointer = 0
wpr_dan2.Show


End Sub

Sub Command5_Click ()
editor.Show
End Sub

Sub Command6_Click ()
mousepointer = 11
Load uzbr
mousepointer = 0
uzbr.Show
```

```
End Sub

Sub Command7_Click ()
mousepointer = 11
Load paliwo
mousepointer = 0
paliwo.Show

End Sub

Sub Command8_Click ()
mousepointer = 11
Load wiatr
mousepointer = 0
wiatr.Show


End Sub

Sub Command9_Click ()
timer1.Enabled = False
End Sub

Sub kp_Click ()
mousepointer = 11
Load wyjscie
mousepointer = 0
wyjscie.Show

End Sub

Sub nota_aut_Click ()
mousepointer = 11
Load nota
mousepointer = 0
nota.Show
End Sub

Sub Timer1_Timer ()

 ruler.Value = ruler.Value + 1
 If ruler.Value = ruler.Max Then
   timer1.Enabled = False
 End If


End Sub

LOT_POZ.FRM

Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer

Sub Command1_Click ()
 fmt$ = "#,##0.00"
 picture1.Cls
If r1 And r2 And r3 And r4 Then
```

```
'obliczenia
' korzystam z tabel od 2.7.3 - 2.7.7

  picture1.Print "Hrlnp= "; Str$(Hrlnp)
  picture1.Print "Hp= "; Str$(hp)
  picture1.Print "Vp= "; Str$(Vp)
  picture1.Print "Zakres= "; Str$(zakres)

 'zakres=1 wyznaczamy  z tabeli 2.7.3
    'W(qk)  stosownie do przeyjętych Ma,m.s.l.śr,iHb



  'następnie dla W(qk) Qk[kg/km]

 If zakres = 1 Then
    hb = hp  'tymczasowe dane !!!!!
    hb = 8000

    th = -5
    ma = .7


 End If 'zakres=1

 If zakres = 2 Then
    hb = hp 'tymczasowe dane Uwaga!!!!!
    hb = 8000
    th = -5
    ma = .7
    msls = 14000


    'dobór tabeli do wyszukania Wqk


    wysz_wqk "T273b.TAB", msls, ma, hb, Cxs, Wqk#
    wysz_n2 "t274.tab", ma, Wqk, th, n2
    wysz_qs "t277.tab", th, ma, n2, hb, qs

    picture1.Print "Wqk= "; Format$(Wqk, fmt$); " zużycie km "
    picture1.Print "n2= "; Format$(n2, fmt$); " % "
    picture1.Print "qs= "; Format$(qs, fmt$); " kg/s "
  End If 'zakres=2



 End If  ' r1,r2,r3,r4



'mousepointer = 11
'Unload lot_poz
'mousepointer = 0

End Sub

Sub Command2_Click ()
```

```
mousepointer = 11
Unload lot_poz
mousepointer = 0

End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False

End Sub

Sub Form_Activate ()

text4.Text = label1.Tag
text1.SetFocus   ' z wykresu t271.tab
label1.BackColor = &H808000
label2.BackColor = &HFFFFFF

End Sub

Sub Label1_Click ()
text4.Text = label1.Tag
r4 = True
zakres = Val(text4.Text)
label1.BackColor = &H808000
label2.BackColor = &HFFFFFF
command1.SetFocus
End Sub

Sub Label2_Click ()
text4.Text = label2.Tag
r4 = True
zakres = Val(text4.Text)
label1.BackColor = &HFFFFFF
label2.BackColor = &H808000
command1.SetFocus
End Sub

Sub Text1_KeyPress (KeyAscii As Integer)

 If KeyAscii = 13 Then

   r1 = True
   HrInp = Val(text1.Text)
   text2.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   If KeyAscii <> Asc(".") Then

     multibeep 10
     KeyAscii = 0
   End If
 End If

End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
```

```
 If KeyAscii = 13 Then

   r2 = True
   hp = Val(text2.Text)
   text3.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   If KeyAscii <> Asc(".") Then

     multibeep 10
     KeyAscii = 0
   End If
 End If


End Sub

Sub Text3_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r3 = True
  Vp = Val(text3.Text)
   text4.SetFocus

 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
  If KeyAscii <> Asc(".") Then

    multibeep 10
    KeyAscii = 0
  End If
End If
 End If


End Sub

Sub Text4_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r4 = True
 zakres = Val(text4.Text)
   command1.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   If KeyAscii <> Asc(".") Then
     multibeep 10
     KeyAscii = 0
   End If
 End If
End Sub
MAPA.FRM

Sub Form_Activate ()

Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double
```

```
scaleheight = droga_lotu * 2
scalewidth = droga_lotu * 2
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "N"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi

For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%


fillcolor = 4
 fillstyle = 6


Circle (robw, robh), 10 + 1, 4

drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)

drawwidth = 1

'rysunek k1ta lotniska

drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)


'rysunek trasy
```

```
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
robw = robw1
robh = robh1
Next i

End Sub


Sub Form_Click ()
mousepointer = 11
Unload mapa
mousepointer = 0

End Sub

Sub w150_Click ()

Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = False
w90.Checked = False
w150.Checked = True
w300.Checked = False
w600.Checked = False
w900.Checked = False

scaleheight = 150
scalewidth = 150
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
```

```
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska

drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
```

```
robw = robw1
robh = robh1
Next i

End Sub

Sub w300_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = False
w90.Checked = False
w150.Checked = False
w300.Checked = True
w600.Checked = False
w900.Checked = False

scaleheight = 300
scalewidth = 300
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska
```

```
drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
robw = robw1
robh = robh1
Next i

End Sub

Sub w45_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = True
w90.Checked = False
w150.Checked = False
w300.Checked = False
w600.Checked = False
w900.Checked = False

scaleheight = 45
scalewidth = 45
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
```

```
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska

drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
```

```
robw = robw1
robh = robh1
Next i

End Sub

Sub w600_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = False
w90.Checked = False
w150.Checked = False
w300.Checked = False
w600.Checked = True
w900.Checked = False

scaleheight = 600
scalewidth = 600
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska
```

```
drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
robw = robw1
robh = robh1
Next i

End Sub

Sub w90_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = False
w90.Checked = True
w150.Checked = False
w300.Checked = False
w600.Checked = False
w900.Checked = False

scaleheight = 90
scalewidth = 90
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
```

```
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska

drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)
fi_lo_st = fi_lor_st
robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
```

```
robw = robw1
robh = robh1
Next i

End Sub

Sub w900_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = False
w45.Checked = False
w90.Checked = False
w150.Checked = False
w300.Checked = False
w600.Checked = False
w900.Checked = True

scaleheight = 900
scalewidth = 900
'height = 5490
'width = 7770
Const pi = 3.14159265
Const count = pi / 18
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "n"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi
For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

fillstyle = 0
Circle (robw, robh), 10 + 1
drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)
drawwidth = 1

'rysunek k1ta lotniska
```

```
drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)
fi_lo_st = fi_lor_st
robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
'rysunek trasy
drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
robw = robw1
robh = robh1
Next i

End Sub

Sub wdroga_Click ()
Dim robh As Double
Dim robh1 As Double
Dim robw As Double
Dim robw1 As Double
Dim droga As Double
Dim hi As String
Dim fi As Double

mapa.Cls
wdroga.Checked = True
w45.Checked = False
w90.Checked = False
w150.Checked = False
w300.Checked = False
w600.Checked = False
w900.Checked = False


scaleheight = droga_lotu * 2
scalewidth = droga_lotu * 2
'height = 5490
'width = 7770
Const pi = 3.14159265
```

```
Const count = pi / 18
Cls
robh = scaleheight / 2
robw = scalewidth / 2
startangle = 0
endangle = (2 * pi)
hi = "N"
fontsize = scaleheight / 1000
currentx = robw
Print "^ N"
'currenty = robh - 250
'currentx = robw * 2 - 100
'print ">"

For fi = 0 To 2 * pi Step count
 robw1 = robw + (scaleheight / 1) * Cos(fi)
 robh1 = robh + (scalewidth / 1) * Sin(fi)
 Line (robw, robh)-(robw1, robh1)
Next fi

For radius% = 10 To robh Step 10
  Circle (robw, robh), radius%, , startangle, endangle
Next radius%

'fillstyle = 0
'Circle (robw, robh), 10 + 1

drawwidth = 3
Line (robw, 0)-(robw, scaleheight)
Line (0, robh)-(scalewidth, robh)

drawwidth = 1

'rysunek k1ta lotniska

drawwidth = 3
fi_lot_st = tab_kat_lot(1, 2) - 90
fi_lot_st = zam_st_rad(fi_lot_st)

robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)
Line (robw, robh)-(robw1, robh1)
fi_lot_st = fi_lot_st + pi
robw1 = robw + (robw / 20) * Cos(fi_lot_st)
robh1 = robh + (robh / 20) * Sin(fi_lot_st)


'rysunek trasy


drawwidth = 1
For i = 1 To tab_pz(2, 7) - 1
If i = 1 Then
fi = tab_pz(1, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(1, 8) '+scaleheight /10
Else
fi = tab_pz(i, 6) * pi / 180
fi = fi + (3 * pi / 2)
droga = tab_pz(i, 8) ' +scaleheight / 10
```

```
End If
robh1 = robh + droga * Sin(fi)
robw1 = robw + droga * Cos(fi)
Line (robw, robh)-(robw1, robh1), &HFF&
drawwidth = 3
PSet (robw1, robh1)
drawwidth = 1
currentx = robw1
currenty = robh1
Print i
robw = robw1
robh = robh1
Next i

End Sub

Sub wyj_Click ()
mousepointer = 11
Unload mapa
mousepointer = 0

End Sub
```

NABOR.FRM

```
Sub Command1_Click ()
mousepointer = 11
Unload nabor
mousepointer = 0

End Sub

Sub Command2_Click ()
mousepointer = 11
Unload nabor
mousepointer = 0
End Sub
```

OBCY.FRM

```
Dim strefa As Integer
Dim poz As Integer
Dim poz1 As Integer
Dim poz2 As Integer
Dim n As Double
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
Dim r6 As Integer
Dim r7 As Integer
Dim r8 As Integer
Dim r9 As Integer
Dim r10 As Integer
Dim tmanr As Double

Dim b As Double
Dim nrob As Double
Dim ds As Double
Dim dwyks As Double
```

```
Dim t360 As Double

Sub Command1_Click ()
If r1 And r2 And r3 And r4 And r5 And r6 Then
   picture1.Cls
   fmt$ = "#,##0.00"

  If Val(text4.Text) = 1 Then
    If hc >= 50 And hc <= 9000 Then
     dwykrl = 85 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji P-37"
    End If
  End If

  If Val(text4.Text) = 2 Then
    If hc >= 50 And hc <= 6000 Then
     dwykrl = 95 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji P-40"
    End If
  End If

  If Val(text4.Text) = 3 Then
    If hc >= 50 And hc <= 11000 Then
     dwykrl = 60 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji P-18"
    End If
  End If


  If Val(text4.Text) = 4 Then
    If hc >= 50 And hc <= 4000 Then
     dwykrl = 85 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji P-19"
    End If
  End If

  If Val(text4.Text) = 5 Then
    If hc >= 50 And hc <= 4000 Then
     dwykrl = 85 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji P-15"
    End If
  End If
  If Val(text4.Text) = 6 Then
    If hc >= 50 And hc <= 4000 Then
     dwykrl = 85 * Sqr(hc / 1000)
     picture1.Print "Dwykr= "; Format$(dwykrl, fmt$); " km "
    Else
      picture1.Print "Poza zasięgiem Stacji ST68Y"
    End If
  End If
```

```
  picture1.Print "Hc= "; Str$(hc); " m "
  picture1.Print "Vc= "; Str$(Vc); " km/h "
  picture1.Print "Kc= "; Str$(Kc); " st "
  picture1.Print "Rodzaj RLS: "; text4.Text
  picture1.Print "Czas pasywny tpas= "; text5.Text; "min"
  picture1.Print "dlo= "; Str$(dlo); " km "
  picture1.Print "Vm= "; Str$(Vm); " km/h "
'*************** Obliczenia *************************
nrob = Vc / Vm
Swzn = lwzn
 If Val(text6.Text) = 1 Then
    picture1.Print "Przednia półsfera "
      ' dlo-przednia półsfera
    tman = 0
    tsum = tpas + twzn + tman
    Vc = Vc / 60
    Vm = Vm / 60

    Srww = (dwykrl + dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)

     'tmanr = tman \ 60
    ' tman = tmanr + ((tman Mod 60) / 100)
     'tmanr = twzn \ 60
     'twzn = tmanr + ((twzn Mod 60) / 100)
    picture1.Print "Tman= "; Str$(tman); " min "
    picture1.Print "Twzn= "; Str$(twzn); " min "
    picture1.Print "Swzn= "; Str$(Swzn); " km "
    picture1.Print "Srww= "; Str$(Srww); " km "

 End If
 If Val(text6.Text) = 2 Then

    picture1.Print "Tylna półsfera "
     '-dlo - tylnia półsfera
    dwykrl = 180
    'vm = kmh_ms(vm)  'Vm w m/s
    Vm = Vm / 60
   tman = .32 * (Vm / Tan(zam_st_rad(b)))

    'vc = kmh_ms(vc)
    Vc = Vc / 60
    tsum = tpas + twzn + tman
    Srww = (dwykrl - dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)
    'tmanr = tman \ 60
    'tman = tmanr + ((tman Mod 60) / 100)
    'tmanr = twzn \ 60
    'twzn = tmanr + ((twzn Mod 60) / 100)

    picture1.Print "Tman= "; Str$(tman); " min "
    picture1.Print "Twzn= "; Str$(twzn); " min "
    picture1.Print "Swzn= "; Str$(Swzn); " km "
    picture1.Print "Srww= "; Str$(Srww); " km "

 End If

'*************** koniec obliczeń ********************

End If
```

```
End Sub

Sub Command2_Click ()
mousepointer = 11
End

'Unload obcy
mousepointer = 0

End Sub

Sub Command3_Click ()
mouseponter = 11
Load start
mousepointer = 0
start.Show

End Sub

Sub Command4_Click ()
 Dim beta As Double
 '*********************************************
'Rys 2 Schemat badań wielkości rubieży wprowadzenia
'      do walki z dyżurowania na lotnisku
'*********************************************

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\rub_t180.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  't0 = Val(text4.Text)
 ' ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
 'dwykrl = 85 * Sqr(Hc / 1000)

 uzb = 1
 rodzaj_paliwa = .785
 beta = 45
 strefa = 2

 'For strefa = 1 To 2 Step 1
 'For b = 90 To 180 Step 90
 b = 180
 For hc = 1000 To 10000 Step 1000
   For dwykrl = 50 To 250 Step 50
    For nrob = .5 To .9 Step .2
     For Vc = 500 To 900 Step 100
```

```
      For tpas = 4 To 8 Step 4


          Vm = Vc / nrob
          hb = hc
          wysokosc = hb
  'vr = pred_ma_vr(ma, hb)

  If uzb = 1 Then
      cxs = 273
       mspst = 12071
  End If


  ' Rodzaj paliwa
   qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
   Qro = qr - (.071 * qr) - (.05 * qr)


' picture1.Cls
' picture1.Print "Cxs= "; Str$(cxs)
' picture1.Print "Mspst= "; Str$(mspst)
' picture1.Print "Qr= "; Str$(qr)
' picture1.Print "Qro= "; Str$(Qro)
' picture1.Print "Uzbr= "; Str$(uzb)
' picture1.Print "Hbar= "; Str$(wysokosc)
' picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


 'masa przedstartowa
 'picture1.Print "  Masa przedstartowa: "
 'picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
 'picture1.Print " Masa startowa:  "
   mspst = mspst + qr
   Qpz = 20 * 10' 20kg/min * 10 min
   msst = mspst - Qpz

'  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


   dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
   dtsr = 10
   If dtsr < 0 Then
     dtsr = 0
   End If

   If dtsr > 20 Then
     dtsr = 20
   End If
```

```
 If msst <= 14500 Then
    msst = 13000
  End If
 If msst > 14500 And msst <= 16500 Then
    msst = 15000
  End If
 If msst > 16500 Then
    msst = 18000
  End If
 If hb < 200 Then
   hb = 200
 End If
 If hb > 13000 Then
   hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

  If dtsr >= 0 And dtsr <= 5 Then
     dtsr = 0
     wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
     lwzn = zmwy
  End If
  If dtsr > 5 And dtsr <= 15 Then
      dtsr = 10
      cxs = 280
     wysz_Qwzn "e:\t2612.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "e:\t2622.tab", msst, dtsr, cxs, hb, zmwy
     twzn = zmwy
     wysz_lwzn "e:\t2625.tab", msst, dtsr, cxs, hb, zmwy
     lwzn = zmwy
  End If
  If dtsr > 15 And dtsr <= 25 Then
      dtsr = 20
     wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
     lwzn = zmwy
  End If
```

```
   wysokosc = hb  ' uwaga podstawiam *********

  '  qlad = 10 * 50
   ' qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
   ' qzn = 130 - (-qzn)
   ' qzn = qzn + qlad

   ' lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
   ' lzn = 130 - (-lzn)

    'ck = 2.8
    'Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

    '********** obliczanie Ch zużycia godzinowego w locie poziomym
    ' przy danej prędkości Vr

 'th = t0 - (.0065 * hb)
 'qlp = Qro - Qpz - qwzn - qzn
 'mslsr = msst - qwzn - qzn - (1 / 2 * qlp)




' wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
' If wqk = 0 Then

  '  mar# = ma
   ' ma = .5
    'wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
   ' ma = mar#
 'End If
 'picture1.Print "Wqk= "; Str$(wqk)

' wysz_n2 "e:\t274.tab", ma, wqk, th, n2
' picture1.Print "n2= "; Str$(n2); "[%]"

 'wysz_qs "e:\t277.tab", th, ma, n2, hb, qs
 ' picture1.Print "qs= "; Str$(qs); "[kg/s]"

' ch = qs * 3600
' qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną

' ************************************




 'nrob = Vc / Vm
  i = i + 1
 Swzn = lwzn
   If strefa = 1 Then

      If i = 1 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
      picture1.Print "i= "; Str$(i)
      End If

        ' dlo-przednia półsfera

      tman = 0
```

```
    tsum = tpas + twzn + tman
    Vc = Vc / 60
    Vm = Vm / 60

    If hc >= 3000 Then
      dlo = 40 + (Vm + Vc) * (1 / 6)
    End If
    If hc < 3000 Then
      dlo = 30 + (Vm + Vc) * (1 / 6)
    End If


    Srww = (dwykrl - dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)

     'tmanr = tman \ 60
    ' tman = tmanr + ((tman Mod 60) / 100)
     'tmanr = twzn \ 60
     'twzn = tmanr + ((twzn Mod 60) / 100)
'    picture1.Print "Tman= "; Str$(tman); " min "
'    picture1.Print "Twzn= "; Str$(twzn); " min "
"    picture1.Print "Swzn= "; Str$(Swzn); " km "
   ' picture1.Print "Srww= "; Str$(Srww); " km "

  End If
  If strefa = 2 Then
    'picture1.Cls
    If i = 1 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
    picture1.Print "i= "; Str$(i)
    End If
    'picture1.Print "Tylna półsfera "
     '-dlo - tylna półsfera
    'Vm = Vm / 60
     If b = 90 Then tman = .32 * ((Vm * .2778) / Tan(zam_st_rad(beta)))
     If b = 180 Then tman = .16 * ((Vm * .2778) / Tan(zam_st_rad(beta)))

     tman = tman / 60
     Vm = Vm / 60
     Vc = Vc / 60

    If hc >= 3000 Then
      dlo = 20 + (Vm - Vc) * (1 / 6)
    End If
    If hc < 3000 Then
      dlo = 18 + (Vm - Vc) * (1 / 6)
    End If


     tsum = tpas + twzn + tman
     Srww = (dwykrl + dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)

    ' picture1.Print "Tman= "; Str$(tman); " min "
    ' picture1.Print "Twzn= "; Str$(twzn); " min "
    ' picture1.Print "Swzn= "; Str$(Swzn); " km "
    ' picture1.Print "Srww= "; Str$(Srww); " km "

  End If

End If ' zakres 1
```

```
'*********************************************
'*********************************************


'Zapisywanie do zbioru
  Vc = Vc * 60
  Vm = Vm * 60
  Srww = Val(Format$(Srww, fmt$))
  Vc = Val(Format$(Vc, fmt$))
  Vm = Val(Format$(Vm, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(hb) + tb$ + Str$(dwykrl) + tb$ + Str$(Vc) + tb$ + Str$(Vm) +
tb$ + Str$(Srww) + tb$ + Str$(tpas) + tb$ + nl$


Next tpas
Next Vc
Next nrob
Next dwykrl
Next hc
'Next b
'Next strefa

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1

End Sub
Dim beta As Double


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\d70_prz.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  't0 = Val(text4.Text)
 ' ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
 'dwykrl = 85 * Sqr(Hc / 1000)

 uzb = 1
 rodzaj_paliwa = .805
 beta = 45
 strefa = 1
 Srww = 70

 'For strefa = 1 To 2 Step 1
```

```
'For b = 90 To 180 Step 90
b = 180
For hc = 1000 To 10000 Step 1000
  For nrob = .5 To .9 Step .2
   For Vc = 500 To 900 Step 100
     For tpas = 4 To 8 Step 4

         Vm = Vc / nrob
         hb = hc
         wysokosc = hb
'vr = pred_ma_vr(ma, hb)

If uzb = 1 Then
    cxs = 273
     mspst = 12071
End If


' Rodzaj paliwa
 qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
 Qro = qr - (.071 * qr) - (.05 * qr)


' picture1.Cls
' picture1.Print "Cxs= "; Str$(cxs)
' picture1.Print "Mspst= "; Str$(mspst)
' picture1.Print "Qr= "; Str$(qr)
' picture1.Print "Qro= "; Str$(Qro)
' picture1.Print "Uzbr= "; Str$(uzb)
' picture1.Print "Hbar= "; Str$(wysokosc)
' picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
'picture1.Print "  Masa przedstartowa: "
'picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
'picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz

'  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


  dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
  dtsr = 10
  If dtsr < 0 Then
    dtsr = 0
  End If
```

```
 If dtsr > 20 Then
   dtsr = 20
 End If


If msst <= 14500 Then
   msst = 13000
 End If
If msst > 14500 And msst <= 16500 Then
   msst = 15000
 End If
If msst > 16500 Then
   msst = 18000
 End If
If hb < 200 Then
  hb = 200
End If
If hb > 13000 Then
  hb = 13000
End If
If cxs < 230 Then
 cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


' wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
 '   pulap_pr = zmwy * 1000
 '   text1.Text = Format$(pulap_pr, fmt$)
' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
'    hrlnp = zmwy
'   text3.Text = Format$(hrlnp, fmt$)

 If dtsr >= 0 And dtsr <= 5 Then
    dtsr = 0
    wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
    qwzn = zmwy
    wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
    twzn = zmwy
    wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
    lwzn = zmwy
End If
If dtsr > 5 And dtsr <= 15 Then
    dtsr = 10
    cxs = 280
   wysz_Qwzn "e:\t2612.tab", msst, dtsr, cxs, hb, zmwy
   qwzn = zmwy
   wysz_twzn "e:\t2622.tab", msst, dtsr, cxs, hb, zmwy
   twzn = zmwy
   wysz_lwzn "e:\t2625.tab", msst, dtsr, cxs, hb, zmwy
   lwzn = zmwy
End If
If dtsr > 15 And dtsr <= 25 Then
    dtsr = 20
   wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
   qwzn = zmwy
   wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
```

```
      twzn = zmwy
      wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
      lwzn = zmwy
    End If

    wysokosc = hb  ' uwaga podstawiam *********

  '  qlad = 10 * 50
   ' qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
   ' qzn = 130 - (-qzn)
   ' qzn = qzn + qlad

   ' lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
   ' lzn = 130 - (-lzn)

    'ck = 2.8
    'Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

    '************ obliczanie Ch zużycia godzinowego w locie poziomym
    ' przy danej prędkości Vr

 'th = t0 - (.0065 * hb)
 'qlp = Qro - Qpz - qwzn - qzn
 'mslsr = msst - qwzn - qzn - (1 / 2 * qlp)




' wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
' If wqk = 0 Then

  '  mar# = ma
   ' ma = .5
    'wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
   ' ma = mar#
 'End If
 'picture1.Print "Wqk= "; Str$(wqk)

' wysz_n2 "e:\t274.tab", ma, wqk, th, n2
' picture1.Print "n2= "; Str$(n2); "[%]"

 'wysz_qs "e:\t277.tab", th, ma, n2, hb, qs
 ' picture1.Print "qs= "; Str$(qs); "[kg/s]"

' ch = qs * 3600
' qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną

' ************************************




 'nrob = Vc / Vm
  i = i + 1
 Swzn = lwzn
   If strefa = 1 Then

      If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
      picture1.Print "i= "; Str$(i)
      End If
```

```
  '  picture1.Print "Przednia półsfera "
      ' dlo-przednia półsfera

    tman = 0
    tsum = tpas + twzn + tman
    Vc = Vc / 60
    Vm = Vm / 60
    dlo = 40 + (Vm + Vc)


    'Srww = (dwykrl - dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)
    dwykrl = Srww * ((1 + nrob)) + dlo + (Vc * tsum) - (nrob * Swzn)

     'tmanr = tman \ 60
    ' tman = tmanr + ((tman Mod 60) / 100)
     'tmanr = twzn \ 60
     'twzn = tmanr + ((twzn Mod 60) / 100)
'    picture1.Print "Tman= "; Str$(tman); " min "
'    picture1.Print "Twzn= "; Str$(twzn); " min "
"    picture1.Print "Swzn= "; Str$(Swzn); " km "
   ' picture1.Print "Srww= "; Str$(Srww); " km "

  End If
  If strefa = 2 Then
    'picture1.Cls
    If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
    picture1.Print "i= "; Str$(i)
    End If
    'picture1.Print "Tylna półsfera "
     '-dlo - tylna półsfera
     dlo = 15
     'Vm = Vm / 60
     If b = 90 Then tman = .32 * ((Vm * .2778) / Tan(zam_st_rad(beta)))
     If b = 180 Then tman = .16 * ((Vm * .2778) / Tan(zam_st_rad(beta)))

     tman = tman / 60
     Vm = Vm / 60
     Vc = Vc / 60
     tsum = tpas + twzn + tman
     'Srww = (dwykrl + dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)
     dwykrl = (Srww * (1 + nrob)) - dlo + (Vc + tsum) - (nrob * Swzn)

    ' picture1.Print "Tman= "; Str$(tman); " min "
    ' picture1.Print "Twzn= "; Str$(twzn); " min "
    ' picture1.Print "Swzn= "; Str$(Swzn); " km "
    ' picture1.Print "Srww= "; Str$(Srww); " km "

  End If

 End If ' zakres 1

'*********************************************
'*********************************************


'Zapisywanie do zbioru
  Vc = Vc * 60
  Vm = Vm * 60
  Srww = Val(Format$(Srww, fmt$))
```

```
  Vc = Val(Format$(Vc, fmt$))
  Vm = Val(Format$(Vm, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(hb) + tb$ + Str$(Vc) + tb$ + Str$(Vm) + tb$ + Str$(dwykrl) +
tb$ + Str$(tpas) + tb$ + nl$


Next tpas
Next Vc
Next nrob
Next hc
'Next b
'Next strefa

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1

End Sub

Sub Command6_Click ()
 Dim beta As Double

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\rs_tyl.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  't0 = Val(text4.Text)
 ' ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
 'dwykrl = 85 * Sqr(Hc / 1000)

 uzb = 1
 rodzaj_paliwa = .805
 beta = 45
 strefa = 2


 'For strefa = 1 To 2 Step 1
 'For b = 90 To 180 Step 90

 For ds = 20 To 40 Step 20
   For dwykrl = 50 To 250 Step 50
    For nrob = .5 To .9 Step .2
     For Vc = 500 To 900 Step 100

           tpas = 2
```

```
        Vm = Vc / nrob
        hb = hc
        wysokosc = hb
 'vr = pred_ma_vr(ma, hb)

' If uzb = 1 Then
 '    cxs = 273
 '    mspst = 12071
' End If


 ' Rodzaj paliwa
 ' qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
 ' Qro = qr - (.071 * qr) - (.05 * qr)


' picture1.Cls
' picture1.Print "Cxs= "; Str$(cxs)
' picture1.Print "Mspst= "; Str$(mspst)
' picture1.Print "Qr= "; Str$(qr)
' picture1.Print "Qro= "; Str$(Qro)
' picture1.Print "Uzbr= "; Str$(uzb)
' picture1.Print "Hbar= "; Str$(wysokosc)
' picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
'picture1.Print "  Masa przedstartowa: "
'picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
'picture1.Print " Masa startowa:  "
'  mspst = mspst + qr
 ' Qpz = 20 * 10' 20kg/min * 10 min
 ' msst = mspst - Qpz

'  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


  'dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
'  dtsr = 10
'  If dtsr < 0 Then
'    dtsr = 0
'  End If

 ' If dtsr > 20 Then
'    dtsr = 20
 ' End If


'  If msst <= 14500 Then
```

```
'    msst = 13000
' End If
' If msst > 14500 And msst <= 16500 Then
'   msst = 15000
'  End If
'  If msst > 16500 Then
'    msst = 18000
'  End If
' If hb < 200 Then
'   hb = 200
' End If
'  If hb > 13000 Then
'   hb = 13000
' End If
'If cxs < 230 Then
' cxs = 230
' End If
'If cxs > 460 Then
' cxs = 460
'End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
'   pulap_pr = zmwy * 1000
'   text1.Text = Format$(pulap_pr, fmt$)
' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
'    hrlnp = zmwy
'   text3.Text = Format$(hrlnp, fmt$)

'  If dtsr >= 0 And dtsr <= 5 Then
'    dtsr = 0
'    wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
'   qwzn = zmwy
'    wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
'    twzn = zmwy
'    wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
'    lwzn = zmwy
'  End If
' If dtsr > 5 And dtsr <= 15 Then
'    dtsr = 10
'    cxs = 280
'   wysz_Qwzn "e:\t2612.tab", msst, dtsr, cxs, hb, zmwy
'   qwzn = zmwy
'   wysz_twzn "e:\t2622.tab", msst, dtsr, cxs, hb, zmwy
'  'twzn = zmwy
'    wysz_lwzn "e:\t2625.tab", msst, dtsr, cxs, hb, zmwy
'    lwzn = zmwy
' End If
'If dtsr > 15 And dtsr <= 25 Then
'    dtsr = 20
'   wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
'   qwzn = zmwy
'  'wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
'  'twzn = zmwy
'  'wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
'    lwzn = zmwy
'End If

' wysokosc = hb  ' uwaga podstawiam *********
```

```
'  qlad = 10 * 50
 ' qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
 ' qzn = 130 - (-qzn)
 ' qzn = qzn + qlad

 ' lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
 ' lzn = 130 - (-lzn)

  'ck = 2.8
  'Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

  '********** obliczanie Ch zużycia godzinowego w locie poziomym
  ' przy danej prędkości Vr

'th = t0 - (.0065 * hb)
'qlp = Qro - Qpz - qwzn - qzn
'mslsr = msst - qwzn - qzn - (1 / 2 * qlp)




' wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
' If wqk = 0 Then

 '  mar# = ma
  ' ma = .5
   'wysz_wqk "e:\t273b.tab", mslsr, ma, hb, cxs, wqk
  ' ma = mar#
'End If
'picture1.Print "Wqk= "; Str$(wqk)

' wysz_n2 "e:\t274.tab", ma, wqk, th, n2
' picture1.Print "n2= "; Str$(n2); "[%]"

 'wysz_qs "e:\t277.tab", th, ma, n2, hb, qs
 ' picture1.Print "qs= "; Str$(qs); "[kg/s]"

' ch = qs * 3600
' qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną

' ***************************************


'nrob = Vc / Vm
 i = i + 1
Swzn = lwzn
  If strefa = 1 Then

     If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
     picture1.Print "i= "; Str$(i)
     End If
   '  picture1.Print "Przednia półsfera "
       ' dlo-przednia półsfera

     tman = 0
     tsum = tpas          'twzn + tman
     Vc = Vc / 60
     Vm = Vm / 60
```

```
    dlo = 30
     t360 = .32 * ((Vm * .2778) / Tan(zam_st_rad(beta)))
     t360 = t360 / 60

    dwyks = dwykrl - ds
    Srww = (dwyks - dlo - (Vc * (tpas + t360))) / (1 + nrob)
    'dwykrl = Srww * ((1 + nrob)) + dlo + (Vc * tsum) - (nrob * Swzn)

     'tmanr = tman \ 60
    ' tman = tmanr + ((tman Mod 60) / 100)
     'tmanr = twzn \ 60
     'twzn = tmanr + ((twzn Mod 60) / 100)
'    picture1.Print "Tman= "; Str$(tman); " min "
'    picture1.Print "Twzn= "; Str$(twzn); " min "
"    picture1.Print "Swzn= "; Str$(Swzn); " km "
   ' picture1.Print "Srww= "; Str$(Srww); " km "

 End If
 If strefa = 2 Then
   'picture1.Cls
   If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
   picture1.Print "i= "; Str$(i)
   End If
   'picture1.Print "Tylna półsfera "
    '-dlo - tylna półsfera
    dlo = 15
    'Vm = Vm / 60

    t360 = .64 * ((Vm * .2778) / Tan(zam_st_rad(beta)))
    t360 = t360 / 60
    'tman = tman / 60
    Vm = Vm / 60
    Vc = Vc / 60
    tsum = tpas + twzn + tman

    dwyks = dwykrl - ds
    Srww = (dwyks + dlo - (Vc * (tpas + t360))) / (1 + nrob)

    'Srww = (dwykrl + dlo - (Vc * tsum) + (nrob * Swzn)) / (1 + nrob)
    'dwykrl = (Srww * (1 + nrob)) - dlo + (Vc + tsum) - (nrob * Swzn)

   ' picture1.Print "Tman= "; Str$(tman); " min "
   ' picture1.Print "Twzn= "; Str$(twzn); " min "
   ' picture1.Print "Swzn= "; Str$(Swzn); " km "
   ' picture1.Print "Srww= "; Str$(Srww); " km "

 End If

End If ' zakres 1


'*****************************************
'*****************************************


'Zapisywanie do zbioru
  Vc = Vc * 60
  Vm = Vm * 60
  Srww = Val(Format$(Srww, fmt$))
  Vc = Val(Format$(Vc, fmt$))
```

```
   Vm = Val(Format$(Vm, fmt$))
   zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
   Write #1, tb$, Str$(zr#) + tb$ + Str$(dwykrl) + tb$ + Str$(Vc) + tb$ + Str$(Vm) + tb$ + Str$(ds) +
tb$ + Str$(Srww) + tb$ + nl$


Next Vc
Next nrob
Next dwykrl
Next ds
'Next b
'Next strefa

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1
End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
r7 = False
r8 = False
r9 = False
r10 = False


End Sub

Sub Form_Activate ()
fmt$ = "#,##0.00"
poz = 0
poz1 = 6
poz2 = 1
label(poz).BackColor = &H808000
text4.Text = label(poz).Tag
label1(poz1).BackColor = &H808000
text5.Text = label1(poz1).Tag
label2(poz2).BackColor = &H808000
text6.Text = label2(poz2).Tag


text1.SetFocus
 r4 = True
 r5 = True
 r6 = True
End Sub

Sub Form_Click ()
fillstyle = 0
Circle (600, 1000), 800

End Sub

Sub Label_Click (Index As Integer)
r4 = True
```

```
label(poz).BackColor = &H80000005
label(Index).BackColor = &H808000
text4.Text = label(Index).Tag
poz = Index

End Sub

Sub Label1_Click (Index As Integer)
r5 = True
label1(poz1).BackColor = &H80000005
label1(Index).BackColor = &H808000
text5.Text = label1(Index).Tag
poz1 = Index

End Sub

Sub Label2_Click (Index As Integer)
r6 = True
label2(poz2).BackColor = &H80000005
label2(Index).BackColor = &H808000
text6.Text = label2(Index).Tag
poz2 = Index

End Sub

Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r1 = True
   hc = Val(text1.Text)
   text2.SetFocus

 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
  'If KeyAscii <> Asc(".") Then

   '  multibeep 10
    ' KeyAscii = 0
  'End If
 End If


End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r2 = True
   Vc = Val(text2.Text)
   text3.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   'If KeyAscii <> Asc(".") Then
   '
     multibeep 10
   '  KeyAscii = 0
  ' end If
 End If


End Sub
```

```
Sub Text3_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r3 = True
 Kc = Val(text3.Text)
   text4.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
  ' If KeyAscii <> Asc(".") Then

    ' multibeep 10
   '  KeyAscii = 0
  ' End If
 End If


End Sub

Sub Text4_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   text5.SetFocus
  End If
End Sub

Sub Text5_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

 text6.SetFocus
  End If


End Sub

Sub Text6_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

 text7.SetFocus
  End If

End Sub

Sub Text7_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r7 = True
    dlo = Val(text7.Text)
   text8.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   'If KeyAscii <> Asc(".") Then

   '  multibeep 10
    ' KeyAscii = 0
   'End If
 End If
```

```
End Sub

Sub Text8_KeyPress (KeyAscii As Integer)

 If KeyAscii = 13 Then

   r8 = True
    Vm = Val(text8.Text)
   text9.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   'If KeyAscii <> Asc(".") Then

    '  multibeep 10
     ' KeyAscii = 0
    'End If
 End If
End Sub

Sub Text9_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r9 = True
   b = Val(text9.Text)
   command1.SetFocus
   If (b < 0 Or b > 60) Then
    picture1.Print "Błąd - niedozwolony kąt przechylenia !!!"
    r9 = False
    text9.SetFocus
   End If
  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   'If KeyAscii <> Asc(".") Then

    '  multibeep 10
     ' KeyAscii = 0
    'End If
 End If
End Sub
```

PALIWO.FRM

```
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Sub Command1_Click ()
mousepointer = 11
'Unload paliwo
mousepointer = 0

End Sub
Sub Command2_Click ()
mousepointer = 11
Unload paliwo
mousepointer = 0

End Sub

Sub Form_Load ()
```

```
r1 = False
r2 = False
r3 = False
picture1.Cls
End Sub

Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r1 = True
   Pzip = Val(text1.Text)
   text2.SetFocus
   If r1 And r2 And r3 Then
    'Wydruk

         Qr = (Pzip + Pdzp) * Ro
         Qro = Qr - .07 * Qr

         picture1.Cls
         picture1.Print " Ilość paliwa w zbiorniku zasadniczym: "; Str$(Pzip); "[litr]"
         picture1.Print " Ilość paliwa w zbiorniku dodatkowym: "; Str$(Pdzp); "[litr]"
         picture1.Print " Gęstość paliwa: "; Str$(Ro); "[kg/L]"
         picture1.Print " Zapas paliwa rozporządzalny Qr= "; Str$(Qr); "[kg]"
         picture1.Print " Zapas paliwa obliczeniowy Qro= "; Str$(Qro); "[kg]"

    r1 = False
    r2 = False
    r3 = False
  End If
 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then

   'If KeyAscii <> Asc(".") Then
    '.multibeep 10
   ' KeyAscii = 0
   'End If
 End If
End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r2 = True
   Pdzp = Val(text2.Text)
   text3.SetFocus
   If r1 And r2 And r3 Then
    'Wydruk
         Qr = (Pzip + Pdzp) * Ro
         Qro = Qr - .07 * Qr

         picture1.Cls
         picture1.Print " Ilość paliwa w zbiorniku zasadniczym: "; Str$(Pzip); "[litr]"
         picture1.Print " Ilość paliwa w zbiorniku dodatkowym: "; Str$(Pdzp); "[litr]"
         picture1.Print " Gęstość paliwa: "; Str$(Ro); "[kg/L]"
         picture1.Print " Zapas paliwa rozporządzalny Qr= "; Str$(Qr); "[kg]"
         picture1.Print " Zapas paliwa obliczeniowy Qro= "; Str$(Qro); "[kg]"

       r1 = False
       r2 = False
       r3 = False
  End If
```

```
 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then

  'If KeyAscii <> Asc(".") Then
  ' multibeep 10
   'KeyAscii = 0
  'End If
 End If
End Sub

Sub Text3_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r3 = True
   Ro = Val(text3.Text)
   text1.SetFocus
   If r1 And r2 And r3 Then
    'Wydruk
         Qr = (Pzip + Pdzp) * Ro
         Qro = Qr - (.071 * Qr)

         picture1.Cls
         picture1.Print " Ilość paliwa w zbiorniku zasadniczym: "; Str$(Pzip); "[litr]"
         picture1.Print " Ilość paliwa w zbiorniku dodatkowym: "; Str$(Pdzp); "[litr]"
         picture1.Print " Gęstość paliwa: "; Str$(Ro); "[kg/L]"
         picture1.Print " Zapas paliwa rozporządzalny Qr= "; Str$(Qr); "[kg]"
         picture1.Print " Zapas paliwa obliczeniowy Qro= "; Str$(Qro); "[kg]"
        r1 = False
        r2 = False
        r3 = False
   End If
 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then

 ' If KeyAscii <> Asc(".") Then
  ' multibeep 10
 ' ' KeyAscii = 0
  'End If
 End If


End Sub

POLACZ_E.FRM

Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim poz As Integer
Dim poz1 As Integer
Dim poz3 As Integer
Dim uzb As Integer
Dim wysokosc As Integer
Dim rodzaj_paliwa As Double
Dim zmwy As Double
Dim zmwy1 As Double
Dim zmwy2 As Double
Dim zmwy3 As Double
Dim zakres As Integer
Dim lzn_pom As Double
Dim qzn_pom As Double
Dim ck As Double
```

```
Dim i As Double

Sub excel ()


 picture1.Print "Cxs= "; Str$(cxs)
 picture1.Print "Mspst= "; Str$(mspst)
 picture1.Print "Qr= "; Str$(qr)
 picture1.Print "Qro= "; Str$(Qro)
 'masa przedstartowa
 picture1.Print "  Masa przedstartowa: "
 picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
'masa startowa
picture1.Print " Masa startowa:  "
   Qpz = 20 * 15 ' 20kg/min * 15 min
   msst = mspst - Qpz

   picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)

'********




nl$ = Chr$(13) + Chr$(10)
Open "write2.txt" For Output As 1
 Write #1, " Taktyczny promień działania", nl$
 Write #1, " Samolot pojedynczy", nl$
 Write #1, " Bez zbiornika dodatkowego", nl$
 Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 Write #1, " 100", "200", "300", "350", nl$
For i = 1 To 100
cell$ = Str$(i)
cell1$ = Str$(i + 1)
cell2$ = Str$(i + 2)
Write #1, "20", cell$, cell1$, cell2$, nl$
Next i
Close #1

End Sub

Sub writedemo ()

nl$ = Chr$(13) + Chr$(10)
Open "write2.txt" For Output As 1
 Write #1, " Taktyczny promień działania", nl$
 Write #1, " Samolot pojedynczy", nl$
 Write #1, " Bez zbiornika dodatkowego", nl$
 Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 Write #1, " 100", "200", "300", "350", nl$
For i = 1 To 100
cell$ = Str$(i)
cell1$ = Str$(i + 1)
cell2$ = Str$(i + 2)
Write #1, "20", cell$, cell1$, cell2$, nl$
Next i
```

```
Close #1
End Sub

Sub Command1_Click ()

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "promien3.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  t0 = Val(text4.Text)
  ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"

For uzb = 1 To 6
 For rodzaj_paliwa = .755 To .855 Step .01
  For hb = 1000 To 10000 Step 1000


vr = pred_ma_vr(ma, hb)

If uzb = 1 Then
    cxs = 295
     mspst = 12187
End If

If uzb = 2 Then
    cxs = 282
    mspst = 11741
End If
If uzb = 3 Then
    cxs = 298
    mspst = 12321
End If
If uzb = 4 Then
    cxs = 317
    mspst = 12711
End If
If uzb = 5 Then
    cxs = 347
    mspst = 13627
End If

If uzb = 6 Then
    cxs = 357
    mspst = 15011
End If
```

```
' Rodzaj paliwa
 qr = (4200 * rodzaj_paliwa) + (1500 * rodzaj_paliwa)
 Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz

  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


 dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
 dtsr = 10
 If dtsr < 0 Then
   dtsr = 0
 End If

 If dtsr > 20 Then
   dtsr = 20
 End If


If msst <= 14500 Then
    msst = 13000
 End If
If msst > 14500 And msst <= 16500 Then
    msst = 15000
 End If
If msst > 16500 Then
    msst = 18000
 End If
If hb < 200 Then
   hb = 200
```

```
 End If
 If hb > 13000 Then
   hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

   If dtsr >= 0 And dtsr <= 5 Then
      dtsr = 0
      wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
      qwzn = zmwy
      wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
      twzn = zmwy
      wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
      lwzn = zmwy
   End If
   If dtsr > 5 And dtsr <= 15 Then
       dtsr = 10
      wysz_Qwzn "t2612.tab", msst, dtsr, cxs, hb, zmwy
      qwzn = zmwy
      wysz_twzn "t2622.tab", msst, dtsr, cxs, hb, zmwy
      twzn = zmwy
      wysz_lwzn "t2625.tab", msst, dtsr, cxs, hb, zmwy
      lwzn = zmwy

End If
If dtsr > 15 And dtsr <= 25 Then
    dtsr = 20
   wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
   qwzn = zmwy
   wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
   twzn = zmwy
   wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
   lwzn = zmwy
End If

wysokosc = hb  ' uwaga podstawiam *********

qlad = 10 * 50
qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
qzn = 130 - (-qzn)
qzn = qzn + qlad

lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
lzn = 130 - (-lzn)

'ck = 2.8
Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307
```

```
  '************ obliczanie Ch zużycia godzinowego w locie poziomym
  ' przy danej prędkości Vr

th = t0 - (.0065 * hb)
qlp = Qro - Qpz - qwzn - qzn
mslsr = msst - qwzn - qzn - (1 / 2 * qlp)



picture1.Cls
picture1.Print "  Dane: "
picture1.Print "Hb= "; Str$(hb); "[m]"
picture1.Print "Ma= "; Str$(ma)
picture1.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
picture1.Print "Cx.s.= "; Str$(cxs)
picture1.Print "th= "; Str$(th)



wysz_wqk "t273b.tab", mslsr, ma, hb, cxs, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslsr, ma, hb, cxs, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)

wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

ch = qs * 3600
qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną



  Rt = .5 * ((qlp / ch * Kt) * vr + lwzn + lzn)

    picture1.Cls
    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"
```

```
  End If ' zakres 1 bez dopalania start


'zakres 2

  If zakres = 2 Then
  qwzn = 0
  lwzn = 0
  twzn = 0



      picture1.Cls
      picture1.Print " Wyniki: "; " : "
      picture1.Print " Hbs"; "="; Str$(hb); "[m]"
      picture1.Print " Zakres pracy"; "="; Str$(zakres)




      picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
      picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
      picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
      picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
      picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
      picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien2.txt" For Output As 1
   Rt = Val(Format$(Rt, fmt$))
   zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
   Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

  End If   'zakres=2

'*****************************************
'*****************************************


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$

   Rt = Val(Format$(Rt, fmt$))
   zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
   Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$
```

```
Next hb
Next rodzaj_paliwa
Next uzb

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1


End Sub


Sub Command10_Click ()
Dim zb_dod As Double
Dim p_zuz As Double
Dim qs1 As Double
Dim qs2 As Double
Dim qlp2 As Double
Dim qlp1 As Double
Dim cxs1 As Double
Dim msbz As Double
Dim mslp1 As Double
Dim mslp2 As Double
Dim mslp2sr As Double
Dim stosunek_qs1 As Double
Dim stosunek_qs2 As Double
Dim l1 As Double
Dim l2 As Double
Dim qs22 As Double
Dim qwp As Double

'wariant uzbrojenia
 fmt$ = "#,##0.00"

 uzb = Val(text1.Text)
 rodzaj_paliwa = Val(text3.Text)
 wysokosc = Val(text2.Text)
 t0 = Val(text4.Text)
 ma = Val(text5.Text)
 hb = wysokosc
 vr = pred_ma_vr(ma, hb)
 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"


 If uzb = 1 Then
    cxs = 295
    mspst = 12187
 End If

 If uzb = 2 Then
    cxs = 282
    mspst = 11741
 End If
 If uzb = 3 Then
    cxs = 298
    mspst = 12321
 End If
```

```
If uzb = 4 Then
    cxs = 317
    mspst = 12711
End If
If uzb = 5 Then
    cxs = 347
    mspst = 13627
End If

If uzb = 6 Then
    cxs = 357
    mspst = 15011
End If


' Rodzaj paliwa
 p_zuz = 95 * rodzaj_paliwa
 zb_dod = (1500 * rodzaj_paliwa)
 qr = (4200 * rodzaj_paliwa) + zb_dod
 Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10 ' 20kg/min * 10 min
  msst = mspst - Qpz

  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


  dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
 dtsr = 10
  If dtsr < 0 Then
    dtsr = 0
  End If
```

```
If dtsr > 20 Then
  dtsr = 20
End If


If msst <= 14500 Then
   msst = 13000
 End If
If msst > 14500 And msst <= 16500 Then
   msst = 15000
 End If
If msst > 16500 Then
   msst = 18000
 End If
If hb < 200 Then
   hb = 200
End If
If hb > 13000 Then
   hb = 13000
End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


' wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)


  If dtsr >= 0 And dtsr <= 5 Then
     dtsr = 0
     wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
     lwzn = zmwy
  End If
  If dtsr > 5 And dtsr <= 15 Then
      dtsr = 10
     wysz_Qwzn "t2612.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2622.tab", msst, dtsr, cxs, hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2625.tab", msst, dtsr, cxs, hb, zmwy
     lwzn = zmwy

  End If
  If dtsr > 15 And dtsr <= 25 Then
      dtsr = 20
     wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
```

```
    twzn = zmwy
    wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
    lwzn = zmwy
  End If


picture1.Cls
picture1.Print "  Dane: "
picture1.Print "Hb= "; Str$(hb); "[m]"
picture1.Print "Ma= "; Str$(ma)
picture1.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
picture1.Print "Cx.s.= "; Str$(cxs)
picture1.Print "th= "; Str$(th)


  qlad = 10 * 50
  qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
  qzn = 130 - (-qzn)
  qzn = qzn + qlad

  lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
  lzn = 130 - (-lzn)


  'ck = 2.8
  Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

  '************ obliczanie Ch zużycia godzinowego w locie poziomym
  ' przy danej prędkości Vr



th = t0 - (.0065 * hb)

qlp1 = zb_dod - qwzn + p_zuz
mslp1 = msst - qwzn
msbz = msst - qwzn - qlp1 - 116
cxs1 = cxs - 22
qlp2 = (4200 * rodzaj_paliwa) - qzn - (.071 * qr) - (.05 * qr) - p_zuz
mslsr = msbz - (1 / 2 * qlp2)

'lot poziomy

wysz_wqk "t273b.tab", mslp1, ma, hb, cxs, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslp1, ma, hb, cxs, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)

wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

' zrzut zbiornika
```

```
 qs1 = qs * 3600



wysz_wqk "t273b.tab", mslsr, ma, hb, cxs1, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslsr, ma, hb, cxs1, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)

wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

qs22 = qs
qs2 = qs * 3600



qwp = (qs22 * 300)'zużycie paliwa na walkę powietrzną

'*********************************************


   Rt = .5 * (lwzn + lzn) + .5 * vr * ((qlp1 / qs1) + ((qlp2 - qwp) / qs2))

  '************************************
      picture1.Cls
      picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
      picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
      picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
      picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
      picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
      picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"



nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien5.txt" For Output As 1
  Rt = Val(Format$(Rt, fmt$))

  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, nl$
  Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1
```

```
  End If ' zakres 1 bez dopalania start


'zakres 2

  If zakres = 2 Then
  qwzn = 0
  lwzn = 0
  twzn = 0



      picture1.Cls
      picture1.Print " Wyniki: "; " : "
      picture1.Print " Hbs"; "="; Str$(hb); "[m]"
      picture1.Print " Zakres pracy"; "="; Str$(zakres)




      picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
      picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
      picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
      picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
      picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
      picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien2.txt" For Output As 1
   Rt = Val(Format$(Rt, fmt$))
   zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
   Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

  End If   'zakres=2

'*****************************************
'*****************************************


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$


End Sub
```

```
Sub Command14_Click ()
i = 0
nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "e:\promien1.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  t0 = Val(text4.Text)
  ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"

For uzb = 1 To 6
 For rodzaj_paliwa = .755 To .855 Step .01
  For hb = 1000 To 10000 Step 1000
       zakres = 1
        uzb = 1

        ma = .7
        t0 = 15
        vr = pred_ma_vr(ma, hb)

If uzb = 1 Then
    cxs = 273
     mspst = 12071
End If

If uzb = 2 Then
    cxs = 260
    mspst = 11625
End If
If uzb = 3 Then
    cxs = 276
    mspst = 12205
End If
If uzb = 4 Then
    cxs = 295
    mspst = 12595
End If
If uzb = 5 Then
    cxs = 325
    mspst = 13511
End If

If uzb = 6 Then
    cxs = 335
    mspst = 14895
End If
```

```
 ' Rodzaj paliwa
  qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
  Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz

  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start


zakres = 1

If zakres = 1 Then


 dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
 dtsr = 10
 If dtsr < 0 Then
   dtsr = 0
 End If

 If dtsr > 20 Then
   dtsr = 20
 End If


If msst <= 14500 Then
    msst = 13000
 End If
If msst > 14500 And msst <= 16500 Then
    msst = 15000
 End If
If msst > 16500 Then
    msst = 18000
 End If
If hb < 200 Then
   hb = 200
```

```
 End If
 If hb > 13000 Then
   hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)
        dtsr = 10
        cxs = 280
   If dtsr >= 0 And dtsr <= 5 Then
      dtsr = 0
      wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
      qwzn = zmwy
      wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
      twzn = zmwy
      wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
      lwzn = zmwy
   End If
   If dtsr > 5 And dtsr <= 15 Then
       dtsr = 10
      wysz_Qwzn "t2612.tab", msst, dtsr, cxs, hb, zmwy
      qwzn = zmwy
      wysz_twzn "t2622.tab", msst, dtsr, cxs, hb, zmwy
      twzn = zmwy
      wysz_lwzn "t2625.tab", msst, dtsr, cxs, hb, zmwy
      lwzn = zmwy

End If
If dtsr > 15 And dtsr <= 25 Then
    dtsr = 20
   wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
   qwzn = zmwy
   wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
   twzn = zmwy
   wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
   lwzn = zmwy
End If

wysokosc = hb  ' uwaga podstawiam *********

qlad = 10 * 50
qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
qzn = 130 - (-qzn)
qzn = qzn + qlad

lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
lzn = 130 - (-lzn)

'ck = 2.8
```

```
  Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

  '************ obliczanie Ch zużycia godzinowego w locie poziomym
  ' przy danej prędkości Vr

th = t0 - (.0065 * hb)
qlp = Qro - Qpz - qwzn - qzn
mslsr = msst - qwzn - qzn - (1 / 2 * qlp)



picture1.Cls
picture1.Print "  Dane: "
picture1.Print "Hb= "; Str$(hb); "[m]"
picture1.Print "Ma= "; Str$(ma)
picture1.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
picture1.Print "Cx.s.= "; Str$(cxs)
picture1.Print "th= "; Str$(th)



wysz_wqk "t273b.tab", mslsr, ma, hb, cxs, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslsr, ma, hb, cxs, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)

wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

ch = qs * 3600
qlp = qlp - (qs * 300)'zużycie paliwa na walkę powietrzną
i = i + 1
If i = 5 Or i = 50 Or i = 100 Or i = 500 Or i = 1000 Or i = 1500 Then
    picture1.Print "i= "; Str$(i)
End If



  Rt = .5 * ((qlp / ch * Kt) * vr + lwzn + lzn)

    picture1.Cls
    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"
```

```
  End If ' zakres 1 bez dopalania start


'zakres 2

  If zakres = 2 Then
  qwzn = 0
  lwzn = 0
  twzn = 0



      picture1.Cls
      picture1.Print " Wyniki: "; " : "
      picture1.Print " Hbs"; "="; Str$(hb); "[m]"
      picture1.Print " Zakres pracy"; "="; Str$(zakres)




      picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
      picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
      picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
      picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
      picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
      picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien1.txt" For Output As 1
   Rt = Val(Format$(Rt, fmt$))
   zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
   Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

  End If   'zakres=2

 '***********************************************
 '***********************************************


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$
```

```
  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Next hb
Next rodzaj_paliwa
Next uzb

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1


End Sub

Sub Command3_Click ()

Dim zb_dod As Double
Dim p_zuz As Double
Dim qs1 As Double
Dim qs2 As Double
Dim qlp2 As Double
Dim qlp1 As Double
Dim cxs1 As Double
Dim msbz As Double
Dim mslp1 As Double
Dim mslp2 As Double
Dim mslp2sr As Double
Dim stosunek_qs1 As Double
Dim stosunek_qs2 As Double
Dim l1 As Double
Dim l2 As Double
Dim qs22 As Double
Dim qwp As Double


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "promien5.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  t0 = Val(text4.Text)
  ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
```

```
For uzb = 1 To 6
 For rodzaj_paliwa = .755 To .855 Step .01
  For hb = 1000 To 10000 Step 1000


  vr = pred_ma_vr(ma, hb)

  If uzb = 1 Then
      cxs = 295
       mspst = 12187
  End If

  If uzb = 2 Then
      cxs = 282
      mspst = 11741
  End If
  If uzb = 3 Then
      cxs = 298
      mspst = 12321
  End If
  If uzb = 4 Then
      cxs = 317
      mspst = 12711
  End If
  If uzb = 5 Then
      cxs = 347
      mspst = 13627
  End If

  If uzb = 6 Then
      cxs = 357
      mspst = 15011
  End If

  ' Rodzaj paliwa
   p_zuz = 95 * rodzaj_paliwa
   zb_dod = (1500 * rodzaj_paliwa)
   qr = (4200 * rodzaj_paliwa) + zb_dod
   Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz
```

```
  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)

'*****************************
' Start



zakres = 1

If zakres = 1 Then


  dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
  dtsr = 10
  If dtsr < 0 Then
    dtsr = 0
  End If

  If dtsr > 20 Then
    dtsr = 20
  End If


 If msst <= 14500 Then
     msst = 13000
  End If
 If msst > 14500 And msst <= 16500 Then
     msst = 15000
  End If
 If msst > 16500 Then
     msst = 18000
  End If
 If hb < 200 Then
    hb = 200
 End If
 If hb > 13000 Then
    hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

    If dtsr >= 0 And dtsr <= 5 Then
       dtsr = 0
       wysz_Qwzn "t2611.tab", msst, dtsr, cxs, hb, zmwy
       qwzn = zmwy
       wysz_twzn "t2621.tab", msst, dtsr, cxs, hb, zmwy
```

```
    twzn = zmwy
    wysz_lwzn "t2624.tab", msst, dtsr, cxs, hb, zmwy
    lwzn = zmwy
End If
If dtsr > 5 And dtsr <= 15 Then
     dtsr = 10
    wysz_Qwzn "t2612.tab", msst, dtsr, cxs, hb, zmwy
    qwzn = zmwy
    wysz_twzn "t2622.tab", msst, dtsr, cxs, hb, zmwy
    twzn = zmwy
    wysz_lwzn "t2625.tab", msst, dtsr, cxs, hb, zmwy
    lwzn = zmwy

End If
If dtsr > 15 And dtsr <= 25 Then
     dtsr = 20
    wysz_Qwzn "t2613.tab", msst, dtsr, cxs, hb, zmwy
    qwzn = zmwy
    wysz_twzn "t2623.tab", msst, dtsr, cxs, hb, zmwy
    twzn = zmwy
    wysz_lwzn "t2626.tab", msst, dtsr, cxs, hb, zmwy
    lwzn = zmwy
End If

wysokosc = hb  ' uwaga podstawiam *********

qlad = 10 * 50
qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
qzn = 130 - (-qzn)
qzn = qzn + qlad

lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
lzn = 130 - (-lzn)

    'ck = 2.8
    Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

    '********** obliczanie Ch zużycia godzinowego w locie poziomym
    ' przy danej prędkości Vr

th = t0 - (.0065 * hb)

qlp1 = zb_dod - qwzn + p_zuz
mslp1 = msst - qwzn
msbz = msst - qwzn - qlp1 - 116
cxs1 = cxs - 22
qlp2 = (4200 * rodzaj_paliwa) - qzn - (.071 * qr) - (.05 * qr) - p_zuz
mslsr = msbz - (1 / 2 * qlp2)

'lot poziomy

wysz_wqk "t273b.tab", mslp1, ma, hb, cxs, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslp1, ma, hb, cxs, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)
```

```
wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

' zrzut zbiornika

 qs1 = qs * 3600



wysz_wqk "t273b.tab", mslsr, ma, hb, cxs1, wqk
If wqk = 0 Then

  mar# = ma
  ma = .5
  wysz_wqk "t273b.tab", mslsr, ma, hb, cxs1, wqk
  ma = mar#
End If
picture1.Print "Wqk= "; Str$(wqk)

wysz_n2 "t274.tab", ma, wqk, th, n2
picture1.Print "n2= "; Str$(n2); "[%]"

wysz_qs "t277.tab", th, ma, n2, hb, qs
 picture1.Print "qs= "; Str$(qs); "[kg/s]"

qs22 = qs
qs2 = qs * 3600


qwp = (qs22 * 300)'zużycie paliwa na walkę powietrzną

'*****************************************

  Rt = .5 * (lwzn + lzn) + .5 * vr * ((qlp1 / qs1) + ((qlp2 - qwp) / qs2))

 '*************************************

    picture1.Cls
    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"



End If ' zakres 1 bez dopalania start
```

```
'zakres 2

 If zakres = 2 Then
 qwzn = 0
 lwzn = 0
 twzn = 0



     picture1.Cls
     picture1.Print " Wyniki: "; " : "
     picture1.Print " Hbs"; "="; Str$(hb); "[m]"
     picture1.Print " Zakres pracy"; "="; Str$(zakres)









     picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
     picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
     picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
     picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
     picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
     picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien5.txt" For Output As 1
  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

 End If   'zakres=2

'=========================================
'=========================================


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$

  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$
```

```
Next hb
Next rodzaj_paliwa
Next uzb

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1


End Sub

Sub Command5_Click ()

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "promien4.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  t0 = Val(text4.Text)
  ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"

For uzb = 1 To 2
 For rodzaj_paliwa = .755 To .855 Step .01
  hb = 13000



  vr = pred_ma_vr(ma, hb)

  If uzb = 1 Then
      cxs = 273
       mspst = 12071
  End If

  If uzb = 2 Then
      cxs = 260
      mspst = 11625
  End If
  If uzb = 3 Then
      cxs = 276
      mspst = 12205
  End If
  If uzb = 4 Then
      cxs = 295
      mspst = 12595
  End If
  If uzb = 5 Then
```

```
    cxs = 325
    mspst = 13511
End If

If uzb = 6 Then
    cxs = 335
    mspst = 14895
End If

' Rodzaj paliwa
 qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
 Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz

  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


  dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
  dtsr = 10
  If dtsr < 0 Then
    dtsr = 0
  End If

  If dtsr > 20 Then
    dtsr = 20
  End If


 If msst <= 14500 Then
    msst = 13000
  End If
```

```
 If msst > 14500 And msst <= 16500 Then
    msst = 15000
  End If
 If msst > 16500 Then
    msst = 18000
  End If
 If hb < 200 Then
   hb = 200
 End If
 If hb > 13000 Then
   hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

  If cxs = 273 Then
    cxs = 270
    'wysz_Qwznt264 "t264.tab", cxs, hb, ma, zmwy1, zmwy2, zmwy3
    qwzn = 1450
    lwzn = 60
    'twzn = zmwy3

End If
If cxs = 260 Then
  cxs = 230
  'wysz_Qwznt264 "t264.tab", cxs, hb, ma, zmwy1, zmwy2, zmwy3
  qwzn = 1450
  lwzn = 57
 ' twzn = zmwy3

End If




 wysokosc = hb  ' uwaga podstawiam *********

 qlad = 10 * 50
 qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
 qzn = 130 - (-qzn)
 qzn = qzn + qlad

 lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
 lzn = 130 - (-lzn)
```

```
   'ck = 2.8
   Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

   '********** obliczanie Ch zużycia godzinowego w locie poziomym
   ' przy danej prędkości Vr

th = t0 - (.0065 * hb)
qlp = Qro - Qpz - qwzn - qzn
mslsr = msst - qwzn - qzn - (1 / 2 * qlp)



picture1.Cls
picture1.Print "  Dane: "
picture1.Print "Hb= "; Str$(hb); "[m]"
picture1.Print "Ma= "; Str$(ma)
picture1.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
picture1.Print "Cx.s.= "; Str$(cxs)
picture1.Print "th= "; Str$(th)



  th = 15

wysz_qst276 "t276.tab", th, ma, hb, zmwy
 qs = 6
 picture1.Print "qs= "; Str$(qs); "[kg/s]"


ch = qs * 3600
qlp = qlp '- (qs * 300)'zużycie paliwa na walkę powietrzną



   Rt = .5 * ((qlp / ch * Kt) * vr + lwzn + lzn)

      picture1.Cls
      picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
      picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
      picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
      picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
      picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
      picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"



 End If ' zakres 1 bez dopalania start


'zakres 2
```

```
If zakres = 2 Then
qwzn = 0
lwzn = 0
twzn = 0



    picture1.Cls
    picture1.Print " Wyniki: "; " : "
    picture1.Print " Hbs"; "="; Str$(hb); "[m]"
    picture1.Print " Zakres pracy"; "="; Str$(zakres)







    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien4.txt" For Output As 1
  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

 End If   'zakres=2

'=========================================
'=========================================


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$

  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$
```

```
Next rodzaj_paliwa
Next uzb

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1



End Sub

Sub Command7_Click ()

nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)

Open "promien6.txt" For Output As 1

 Write #1, tb$ + nl$
'wariant uzbrojenia
  fmt$ = "#,##0.00"

  'uzb = Val(text1.Text)
  'rodzaj_paliwa = Val(text3.Text)
  'wysokosc = Val(text2.Text)

  t0 = Val(text4.Text)
  ma = Val(text5.Text)


 'Picture1.Pr7int " Wysokosc"; "="; Format$(wysokosc, fmt$); "[kg]"
' Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
' Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"

For uzb = 1 To 2
 For rodzaj_paliwa = .755 To .855 Step .01
  hb = 13000



  vr = pred_ma_vr(ma, hb)

  If uzb = 1 Then
      cxs = 273
       mspst = 12071
  End If

  If uzb = 2 Then
      cxs = 260
      mspst = 11625
  End If
  If uzb = 3 Then
      cxs = 276
      mspst = 12205
  End If
  If uzb = 4 Then
      cxs = 295
      mspst = 12595
  End If
  If uzb = 5 Then
```

```
    cxs = 325
    mspst = 13511
End If

If uzb = 6 Then
    cxs = 335
    mspst = 14895
End If

' Rodzaj paliwa
 qr = (4200 * rodzaj_paliwa) '+ (1500 * rodzaj_paliwa)
 Qro = qr - (.071 * qr) - (.05 * qr)


picture1.Cls
picture1.Print "Cxs= "; Str$(cxs)
picture1.Print "Mspst= "; Str$(mspst)
picture1.Print "Qr= "; Str$(qr)
picture1.Print "Qro= "; Str$(Qro)
picture1.Print "Uzbr= "; Str$(uzb)
picture1.Print "Hbar= "; Str$(wysokosc)
picture1.Print "Rodzaj paliwa= "; Str$(rodzaj_paliwa)


'masa przedstartowa
picture1.Print "  Masa przedstartowa: "
picture1.Print "Mspst=Qr+Msu+Mzp= "; Str$(mspst + qr)
picture1.Print " Masa startowa:  "
  mspst = mspst + qr
  Qpz = 20 * 10' 20kg/min * 10 min
  msst = mspst - Qpz

  picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)


'*****************************
' Start



zakres = 1

If zakres = 1 Then


  dtsr = ((t0 - 15) + (t0 - hb * .0065) - 15) / 2
  dtsr = 10
  If dtsr < 0 Then
    dtsr = 0
  End If

  If dtsr > 20 Then
    dtsr = 20
  End If


 If msst <= 14500 Then
    msst = 13000
  End If
```

```
 If msst > 14500 And msst <= 16500 Then
    msst = 15000
  End If
 If msst > 16500 Then
    msst = 18000
  End If
 If hb < 200 Then
   hb = 200
 End If
 If hb > 13000 Then
   hb = 13000
 End If
If cxs < 230 Then
  cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


'  wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
  '   pulap_pr = zmwy * 1000
  '   text1.Text = Format$(pulap_pr, fmt$)
 ' wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
 '     hrlnp = zmwy
 '    text3.Text = Format$(hrlnp, fmt$)

  If cxs = 273 Then
    cxs = 270
    wysz_Qwznt264 "t264.tab", cxs, hb, ma, zmwy1, zmwy2, zmwy3
    qwzn = 1200'zmwy1
    lwzn = 53  'zmwy2
    twzn = zmwy3

End If
If cxs = 260 Then
  cxs = 230
  wysz_Qwznt264 "t264.tab", cxs, hb, ma, zmwy1, zmwy2, zmwy3
  qwzn = 1150 'zmwy1
  lwzn = 48'zmwy2
  twzn = zmwy3

End If



 wysokosc = hb  ' uwaga podstawiam *********

 qlad = 10 * 50
 qzn = ((.267 * (wysokosc * .0023)) - 8) * 17.5
 qzn = 130 - (-qzn)
 qzn = qzn + qlad

 lzn = ((.467 * (wysokosc * .0023)) - 14) * 10
 lzn = 130 - (-lzn)
```

```
   'ck = 2.8
   Kt = 1' współczynnik temperatury kt=1+P lub kt=1-P str 307

   '************ obliczanie Ch zużycia godzinowego w locie poziomym
   ' przy danej prędkości Vr

th = t0 - (.0065 * hb)
qlp = Qro - Qpz - qwzn - qzn
mslsr = msst - qwzn - qzn - (1 / 2 * qlp)



picture1.Cls
picture1.Print "  Dane: "
picture1.Print "Hb= "; Str$(hb); "[m]"
picture1.Print "Ma= "; Str$(ma)
picture1.Print "ms.l.śr.= "; Str$(mslsr); "[kg]"
picture1.Print "Cx.s.= "; Str$(cxs)
picture1.Print "th= "; Str$(th)



 th = 15

wysz_qst276 "t276.tab", th, ma, hb, zmwy
 qs = 3.5'zmwy
 picture1.Print "qs= "; Str$(qs); "[kg/s]"


ch = qs * 3600
qlp = qlp '- (qs * 300)'zużycie paliwa na walkę powietrzną


  Rt = .5 * ((qlp / ch * Kt) * vr + lwzn + lzn)

    picture1.Cls
    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"



 End If ' zakres 1 bez dopalania start


'zakres 2
```

```
If zakres = 2 Then
qwzn = 0
lwzn = 0
twzn = 0



    picture1.Cls
    picture1.Print " Wyniki: "; " : "
    picture1.Print " Hbs"; "="; Str$(hb); "[m]"
    picture1.Print " Zakres pracy"; "="; Str$(zakres)







    picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
    picture1.Print " Qzn"; "="; Format$(qzn, fmt$); "[kg]"
    picture1.Print " Lzn"; "="; Format$(lzn, fmt$); "[km]"
    picture1.Print " Rt"; "="; Format$(Rt, fmt$); "[km]"


nl$ = Chr$(13) + Chr$(10)
tb$ = Chr$(9)
Open "promien2.txt" For Output As 1
  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(uzb) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$


Close #1

 End If   'zakres=2

'****************************************
'****************************************


 'Zapisywanie do zbioru
' Write #1, " Taktyczny promień działania", nl$
 'Write #1, " Samolot pojedynczy", nl$
' Write #1, " Bez zbiornika dodatkowego", nl$
' Write #1, " Bez dopalania", nl$
' Write #1, " Badanie w funkcji: paliwa, wariantu uzbrojenia,wysokości barometrycznej lotu", nl$

 'Write #1, "rodzaj_paliwa" + tb$ + "uzb" + tb$ + "Hb" + tb$ + "Rt" + nl$


  Rt = Val(Format$(Rt, fmt$))
  zr# = 0  ' zmienna robocza - w Excelu nie ma problemu
  Write #1, tb$, Str$(zr#) + tb$ + Str$(uzb) + tb$ + Str$(rodzaj_paliwa) + tb$ + Str$(hb) + tb$ +
Str$(Rt) + nl$
```

```
Next rodzaj_paliwa
Next uzb

picture1.Cls
picture1.Print "Koniec obliczeń !!!"
Close #1


End Sub

Sub Form_Activate ()
r1 = False
r2 = False
r3 = False

poz = 0
poz1 = 1
poz3 = 22

label(poz).BackColor = &H808000
text1.Text = label(poz).Tag

label1(poz1).BackColor = &H808000
text2.Text = label1(poz1).Caption

label3(poz3).BackColor = &H808000
text3.Text = label3(poz3).Caption

End Sub

Sub Label_Click (Index As Integer)
label(poz).BackColor = &H80000005
label(Index).BackColor = &H808000
text1.Text = label(Index).Tag
poz = Index
End Sub

Sub Label1_Click (Index As Integer)
label1(poz1).BackColor = &H80000005
label1(Index).BackColor = &H808000
text2.Text = label1(Index).Caption
poz1 = Index

End Sub

Sub Label3_Click (Index As Integer)
label3(poz3).BackColor = &H80000005
label3(Index).BackColor = &H808000
text3.Text = label3(Index).Caption
poz3 = Index

End Sub

PUNKTY_ZWR.FRM

Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
```

```
Dim r6 As Integer
Dim f_mapa As Integer
Dim btekst As String
Dim ltekst As String
Dim i As Integer

Sub Command1_Click ()
'mousepointer = 11
'Load etapy
'mousepointer = 0
'etapy.Show
  Unload zwroty
  End

End Sub

Sub Command2_Click ()
mousepointer = 11
Unload zwroty
mousepointer = 0

End Sub

Sub Command3_Click ()
Dim xrob As Double
Dim yrob As Double
Dim hprob As Double
Dim vpob As Double
Dim betarob As Double
Dim brob As Double
Dim lrob As Double

  tab_pz(2, 7) = i - 1
droga_lotu = 0
If tab_pz(2, 7) > 1 Then
        i = 2
        xrob = tab_pz(i, 1)
        yrob = tab_pz(i, 2)
        hprob = tab_pz(i, 3)
        vprob = tab_pz(i, 4)
        betarob = tab_pz(i, 5)
        brob = tab_pz(i, 9)
        lrob = tab_pz(i, 10)

    For i = 2 To tab_pz(2, 7) - 1
            tab_pz(i, 1) = tab_pz(i + 1, 1)
            tab_pz(i, 2) = tab_pz(i + 1, 2)
            tab_pz(i, 3) = tab_pz(i + 1, 3)
            tab_pz(i, 4) = tab_pz(i + 1, 4)
            tab_pz(i, 5) = tab_pz(i + 1, 5)
            tab_pz(i, 9) = tab_pz(i + 1, 9)
            tab_pz(i, 10) = tab_pz(i + 1, 10)
    Next i

        i = tab_pz(2, 7)
        tab_pz(i, 1) = xrob
        tab_pz(i, 2) = yrob
        tab_pz(i, 3) = hprob
        tab_pz(i, 4) = vprob
        tab_pz(i, 5) = betarob
```

```
        tab_pz(i, 9) = brob
        tab_pz(i, 10) = lrob

    For i = 1 To tab_pz(2, 7) - 1
     tab_pz(i, 8) = Sqr(((tab_pz(i + 1, 1) - tab_pz(i, 1)) ^ 2) + ((tab_pz(i + 1, 2) - tab_pz(i, 2)) ^ 2))
     droga_lotu = droga_lotu + Sqr(((tab_pz(i + 1, 1) - tab_pz(i, 1)) ^ 2) + ((tab_pz(i + 1, 2) - tab_pz(i,
2)) ^ 2))
    Next i
  End If

  RKDM
  For i = 1 To tab_pz(2, 7) - 1
   picture1.Print "KURS= "; Str$(i); "  "; Str$(tab_pz(i, 6))

  Next i

  kurs_wysokosc 1, 1, 1

  picture1.Cls
  picture1.Print "Droga lotu= "; Str$(droga_lotu); "[km]"
  picture1.Print "  Dane: "
  picture1.Print "K1t= "; Str$(Val(text5.Text))
  picture1.Print "Sinus(k1t)= "; Str$(Sin(Val(text5.Text) * 3.14 / 180))
  picture1.Print "Tangens(k1t)= "; Str$(Tan(Val(text5.Text)))
  picture1.Print "Arcustangens(k1t)^-1= "; Str$((Atn(Tan(Val(text5.Text) * 3.14 / 180))) * 180 / 3.14)

  numer_etapu = i - 2'kolejny etap,punkt zwrotny
  mousepointer = 11
  ' Load etapy
  mousepointer = 0
  ' etapy.show

End Sub

Sub Command4_Click ()

Dim xrob As Double
Dim yrob As Double
Dim hprob As Double
Dim vpob As Double
Dim betarob As Double
Dim brob As Double
Dim lrob As Double


If f_mapa Then

 tab_pz(2, 7) = i - 1
 droga_lotu = 0

 If tab_pz(2, 7) > 1 Then
        i = 2
        xrob = tab_pz(i, 1)
        yrob = tab_pz(i, 2)
        hprob = tab_pz(i, 3)
        vprob = tab_pz(i, 4)
        betarob = tab_pz(i, 5)
        brob = tab_pz(i, 9)
        lrob = tab_pz(i, 10)
```

```
    For i = 2 To tab_pz(2, 7) - 1
            tab_pz(i, 1) = tab_pz(i + 1, 1)
            tab_pz(i, 2) = tab_pz(i + 1, 2)
            tab_pz(i, 3) = tab_pz(i + 1, 3)
            tab_pz(i, 4) = tab_pz(i + 1, 4)
            tab_pz(i, 5) = tab_pz(i + 1, 5)
            tab_pz(i, 9) = tab_pz(i + 1, 9)
            tab_pz(i, 10) = tab_pz(i + 1, 10)
    Next i

       i = tab_pz(2, 7)
       tab_pz(i, 1) = xrob
       tab_pz(i, 2) = yrob
       tab_pz(i, 3) = hprob
       tab_pz(i, 4) = vprob
       tab_pz(i, 5) = betarob
       tab_pz(i, 9) = brob
       tab_pz(i, 10) = lrob

   For i = 1 To tab_pz(2, 7) - 1
     tab_pz(i, 8) = Sqr(((tab_pz(i + 1, 1) - tab_pz(i, 1)) ^ 2) + ((tab_pz(i + 1, 2) - tab_pz(i, 2)) ^ 2))
     droga_lotu = droga_lotu + Sqr(((tab_pz(i + 1, 1) - tab_pz(i, 1)) ^ 2) + ((tab_pz(i + 1, 2) - tab_pz(i,
2)) ^ 2))
   Next i
  End If

  RKDM

  For i = 1 To tab_pz(2, 7) - 1
    picture1.Print "KURS= "; Str$(i); "  "; Str$(tab_pz(i, 6))
    picture1.Print "Droga= "; Str$(i); "  "; Str$(tab_pz(i, 8))


  Next i

    picture1.Print "Droga lotu= "; Str$(droga_lotu)


 ' kurs_wysokosc 1, 1, 1

  'picture1.Cls
  'picture1.Print "Droga lotu= "; Str$(droga_lotu); "[km]"
 ' picture1.Print "  Dane: "
 ' picture1.Print "K1t= "; Str$(Val(text5.Text))
 ' picture1.print "Sinus(k1t)= ";str$(sin(val(text5.text)*3.14/180)
 ' picture1.Print "Tangens(k1t)= "; Str$(Tan(Val(text5.Text)))
  'picture1.Print "Arcustangens(k1t)^-1= "; Str$((Atn(Tan(Val(text5.Text) * 3.14 / 180))) * 180 / 3.14)

 ' numer_etapu = i - 2'kolejny etap,punkt zwrotny
'  mousepointer = 11
  ' Load etapy
"  mousepointer = 0
  ' etapy.show

End If

 f_mapa = False
 mousepointer = 11
Load mapa
 mousepointer = 0
```

```
  mapa.Show

End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
i = 3
f_mapa = True
picture1.Cls

End Sub

Sub Form_Activate ()
text1.SetFocus
End Sub

Sub Text1_KeyPress (keyascii As Integer)

  If keyascii = 13 Then

    r1 = True
    btekst = text1.Text
    text2.SetFocus
    If r1 And r2 And r3 And r4 And r5 Then
      'obliczenia
       If i < 21 Then
          b = zam_na_st(btekst)
          l = zam_na_st(ltekst)
          zam_bl_na_xy b, l

          tab_pz(i, 9) = b
          tab_pz(i, 10) = l
          tab_pz(i, 1) = x
          tab_pz(i, 2) = y
          tab_pz(i, 3) = Hp
          tab_pz(i, 4) = Vp
          tab_pz(i, 10) = beta

          picture1.Cls
          picture1.Print "Punkt "; Str$(i - 2); " : "
          picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
          picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
          picture1.Print " b"; Str$(i - 2); "="; Str$(b); "[st]"
          picture1.Print " l"; Str$(i - 2); "="; Str$(l); "[st]"
          picture1.Print " Hp"; Str$(i - 2); "="; Str$(Hp); "[m]"
          picture1.Print " Vp"; Str$(i - 2); "="; Str$(Vp); "[km/h]"
          picture1.Print " Beta"; Str$(i - 2); "="; Str$(beta); "[st]"
          i = i + 1
          r1 = False
          r2 = False
          r3 = False
          r4 = False
          r5 = False
       End If
    End If
```

```
   ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
     'if keyascii <>asc(".") then
      ' multibeep 10
      'keyascii=0
      'end if
  End If

End Sub

Sub Text2_KeyPress (keyascii As Integer)
  If keyascii = 13 Then

    r2 = True
    ltekst = text2.Text
    text3.SetFocus
    If r1 And r2 And r3 And r4 And r5 Then
      'obliczenia
       If i < 21 Then
          b = zam_na_st(btekst)
          l = zam_na_st(ltekst)
          zam_bl_na_xy b, l
          tab_pz(i, 9) = b
          tab_pz(i, 10) = l
          tab_pz(i, 1) = x
          tab_pz(i, 2) = y
          tab_pz(i, 3) = Hp
          tab_pz(i, 4) = Vp
          tab_pz(i, 10) = beta

         picture1.Cls
         picture1.Print "Punkt "; Str$(i - 2); " : "
         picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
         picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
         picture1.Print " b"; Str$(i - 2); "="; Str$(b); "[st]"
         picture1.Print " l"; Str$(i - 2); "="; Str$(l); "[st]"
         picture1.Print " Hp"; Str$(i - 2); "="; Str$(Hp); "[m]"
         picture1.Print " Vp"; Str$(i - 2); "="; Str$(Vp); "[km/h]"
         picture1.Print " Beta"; Str$(i - 2); "="; Str$(beta); "[st]"
         i = i + 1
         r1 = False
         r2 = False
         r3 = False
         r4 = False
         r5 = False
        End If
       End If
   ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
     'if keyascii <>asc(".") then
      ' multibeep 10
      'keyascii=0
      'end if
  End If

End Sub

Sub Text3_KeyPress (keyascii As Integer)
  If keyascii = 13 Then

    r3 = True
    Hp = Val(text3.Text)
```

```
text4.SetFocus
If r1 And r2 And r3 And r4 And r5 Then
 'obliczenia
   If i < 21 Then
      b = zam_na_st(btekst)
      l = zam_na_st(ltekst)
      zam_bl_na_xy b, l
      tab_pz(i, 9) = b
      tab_pz(i, 10) = l
      tab_pz(i, 1) = x
      tab_pz(i, 2) = y
      tab_pz(i, 3) = Hp
      tab_pz(i, 4) = Vp
      tab_pz(i, 10) = beta

     picture1.Cls
     picture1.Print "Punkt "; Str$(i - 2); " : "
     picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
     picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
     picture1.Print " b"; Str$(i - 2); "="; Str$(b); "[st]"
     picture1.Print " l"; Str$(i - 2); "="; Str$(l); "[st]"
     picture1.Print " Hp"; Str$(i - 2); "="; Str$(Hp); "[m]"
     picture1.Print " Vp"; Str$(i - 2); "="; Str$(Vp); "[km/h]"
     picture1.Print " Beta"; Str$(i - 2); "="; Str$(beta); "[st]"
     i = i + 1
     r1 = False
     r2 = False
     r3 = False
     r4 = False
     r5 = False
    End If
   End If
 ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
     'if keyascii <>asc(".") then
      ' multibeep 10
      'keyascii=0
      'end if
  End If

End Sub

Sub Text4_KeyPress (keyascii As Integer)
 If keyascii = 13 Then

   r4 = True
   Vp = Val(text4.Text)
   text5.SetFocus
   If r1 And r2 And r3 And r4 And r5 Then
    'obliczenia
      If i < 21 Then
         b = zam_na_st(btekst)
         l = zam_na_st(ltekst)
         zam_bl_na_xy b, l
         tab_pz(i, 9) = b
         tab_pz(i, 10) = l
         tab_pz(i, 1) = x
         tab_pz(i, 2) = y
         tab_pz(i, 3) = Hp
         tab_pz(i, 4) = Vp
```

```
        tab_pz(i, 10) = beta

        picture1.Cls
        picture1.Print "Punkt "; Str$(i - 2); " : "
        picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
        picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
        picture1.Print " b"; Str$(i - 2); "="; Str$(b); "[st]"
        picture1.Print " l"; Str$(i - 2); "="; Str$(l); "[st]"
        picture1.Print " Hp"; Str$(i - 2); "="; Str$(Hp); "[m]"
        picture1.Print " Vp"; Str$(i - 2); "="; Str$(Vp); "[km/h]"
        picture1.Print " Beta"; Str$(i - 2); "="; Str$(beta); "[st]"
        i = i + 1
        r1 = False
        r2 = False
        r3 = False
        r4 = False
        r5 = False
       End If
      End If
    ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
      If keyascii <> Asc(".") Then
       multibeep 10
      keyascii = 0
      End If
   End If

End Sub

Sub Text5_KeyPress (keyascii As Integer)
  If keyascii = 13 Then

    r5 = True
    beta = Val(text5.Text)
    text1.SetFocus
    If r1 And r2 And r3 And r4 And r5 Then
     'obliczenia
      If i < 21 Then
        b = zam_na_st(btekst)
        l = zam_na_st(ltekst)
        zam_bl_na_xy b, l
        tab_pz(i, 9) = b


        tab_pz(i, 10) = l
        tab_pz(i, 1) = x
        tab_pz(i, 2) = y
        tab_pz(i, 3) = Hp
        tab_pz(i, 4) = Vp
        tab_pz(i, 10) = beta

       picture1.Cls
       picture1.Print "Punkt "; Str$(i - 2); " : "
       picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
       picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
       picture1.Print " b"; Str$(i - 2); "="; Str$(b); "[st]"
       picture1.Print " l"; Str$(i - 2); "="; Str$(l); "[st]"
       picture1.Print " Hp"; Str$(i - 2); "="; Str$(Hp); "[m]"
       picture1.Print " Vp"; Str$(i - 2); "="; Str$(Vp); "[km/h]"
       picture1.Print " Beta"; Str$(i - 2); "="; Str$(beta); "[st]"
       i = i + 1
```

```
        r1 = False
        r2 = False
        r3 = False
        r4 = False
        r5 = False
       End If
      End If
   ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
     'if keyascii <>asc(".") then
      ' multibeep 10
      'keyascii=0
      'end if
  End If

End Sub
```

ROZPUSZCZ.FRM

```
Dim r1 As Integer
Dim r2 As Integer
Dim poz As Integer
Dim poz1 As Integer

Sub Command1_Click ()
 If text2.Text = 1 Then
    mousepointer = 11
    Load rozpusz1
    mousepointer = 0
    rozpusz1.Show
  Else
    mousepointer = 11
    Load rozpusz2
    mousepointer = 0
    rozpusz2.Show
  End If

END SUB

Sub Command2_Click ()
mousepointer = 11
Unload rozpusz
mousepointer = 0

End Sub

Sub Form_Load ()
r1 = False
r2 = False

poz = 0
poz1 = 1

label(poz).BackColor = &H808000
text1.Text = label(poz).Tag


label1(poz1).BackColor = &H808000
text2.Text = label1(poz1).Tag
```

```
End Sub

Sub Label_Click (Index As Integer)
label(poz).BackColor = &H80000005
label(Index).BackColor = &H808000
text1.Text = label(Index).Tag
poz = Index

End Sub

Sub Label1_Click (Index As Integer)
label1(poz1).BackColor = &H80000005
label1(Index).BackColor = &H808000
text2.Text = label1(Index).Tag
poz1 = Index

End Sub

Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r1 = True

    liczba_sam = Val(text1.Text)
    If liczb_sam = 3 Then
      liczba_sam = 4
    End If



  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
     Beep
     KeyAscii = 0
  End If
 End If

End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r2 = True
    warunki_atm = Val(text2.Text)



  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
     Beep
     KeyAscii = 0
  End If

End Sub

ROZPUSZCZNIE1.FRM

Dim poz As Integer
Sub Command1_Click ()
mousepointer = 11
Unload rozpusz1
Unload rozpusz
mousepointer = 0
```

```
End Sub
Sub Command2_Click ()
mousepointer = 11
Unload rozpusz1
mousepointer = 0


End Sub

Sub Form_Activate ()
poz = 0
label(0).BackColor = &H808000
text1.Text = label(poz).Tag

End Sub
Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub
```

ROZPUSZCZANIE2.FRM

```
Sub Command1_Click ()
mousepointer = 11
Unload rozpusz2
Unload rozpusz
mousepointer = 0

End Sub
End Sub

Sub Command2_Click ()
mousepointer = 11
Unload rozpusz2
mousepointer = 0

End Sub

Sub Form_Activate ()
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub

Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub
```

START.FRM

```
Dim r1 As Integer
```

```
Dim r2 As Integer
Dim Hbs As Double
Dim zakres As Double
Dim k As Integer
Dim x1 As Double
Dim y1 As Double
Dim HP1 As Double
Dim VP1 As Double
Dim BETA1 As Double
Dim KURS1 As Double
Dim Q1 As Double
Dim L1 As Double
Dim T1 As Double
Dim M1 As Double
Dim CX1 As Double
Dim hrlnp As Double

Sub Command1_Click ()
mouseponter = 11
Load lot_poz
mousepointer = 0
lot_poz.Show

 If r1 And r2 Then
   'korzystam z nomogramów t261.tab i t262.tab
   'aby wyznaczyć Q,L,t

   T0 = 30
      dt1 = T0 - 15
      dt2 = T0 - (.0065 * Hbs)
      tsr = (dt1 + dt2) / 2
      Picture1.Cls
      Picture1.Print " Wyniki: "; " : "
      Picture1.Print " Hbs"; "="; Str$(Hbs); "[m]"
      Picture1.Print " Zakres pracy"; "="; Str$(zakres); "[m]"
      Picture1.Print " tsr"; "="; Str$(tsr); "[st.c]"
      r1 = False
      r2 = False
      'Obliczenia

Picture1.Print " Cxs= "; Str$(cxs)
Picture1.Print " Mspsts= "; Str$(Mspst)
Picture1.Print " Qr= "; Str$(Qr)
'masa przedstartowa
Picture1.Print " Masa przedstartowa:  "
Picture1.Print " Mspst=Qr+Msu+Mzp= "; Str$(Mspst + Qr)
'masa startowa
Picture1.Print " Masa startowa:  "
   Qpz = qz * tz
   msst = Mspst - Qpz

Picture1.Print " Msst=Mspst-Qpz= "; Str$(msst - Qpz)

'Parametry wznoszenia z t261.tab i t262.tab

Q1 = 0
T1 = 0
L1 = 0
'masa samolotu na końcu wznoszenia
M1 = msst - Q1
```

```
'masa paliwa przeznaczona na lądowanie
Qlad = tlad * Qkr
        'tab_odc(numer_etapu, iw, 1) = x1
        'tab_odc(numer_etapu, iw, 2) = y1
        'tab_odc(numer_etapu, iw, 3) = HP1
        'tab_odc(numer_etapu, iw, 4) = VP1
        'tab_odc(numer_etapu, iw, 5) = BETA1
        'tab_odc(numer_etapu, iw, 6) = KURS1
        'tab_odc(numer_etapu, iw, 7) = Q1
       ' tab_odc(numer_etapu, iw, 8) = L1
       ' tab_odc(numer_etapu, iw, 9) = T1
        ' tab_odc(numer_etapu, iw, 10) = M1
        ' 'tab_odc(numer_etapu, iw, 11) = CX1
        ' For g% = 1 To 30000
         'Next g%

         mousepointer = 11
         Unload start
         mousepointer = 0


  End If

End Sub

Sub Command2_Click ()
mousepointer = 11
Unload start
mousepointer = 0

End Sub

Sub Command3_Click ()
```

```
Sub Command3_Click ()
  fmt$ = "#,##0.00"
If r1 And r2 Then
 If zakres = 1 Then
       'obliczenia dla zakresu 1 bez dopalania
   'msst = 15000
   'dtsr = 0
   'cxs = 460
   'hb = 7000
   dtsr = ((T0 - 15) + (T0 - Hb * .0065) - 15) / 2
   If dtsr < 0 Then
     dtsr = 0
   End If

   If dtsr > 20 Then
     dtsr = 20
   End If


  If msst <= 14500 Then
     msst = 13000
   End If
  If msst > 14500 And msst <= 16500 Then
     msst = 15000
   End If
  If msst > 16500 Then
     msst = 18000
   End If
```

```
If Hb < 200 Then
  Hb = 200
End If
If Hb > 13000 Then
  Hb = 13000
End If
If cxs < 230 Then
 cxs = 230
End If
If cxs > 460 Then
 cxs = 460
End If


 wysz_pulap_praktyczny "t263.tab", msst, cxs, zmwy
   pulap_pr = zmwy * 1000
   text1.Text = Format$(pulap_pr, fmt$)
 wysz_dlugotrwalosc "t271.tab", msst, cxs, zmwy
    hrlnp = zmwy
   text3.Text = Format$(hrlnp, fmt$)

  If dtsr >= 0 And dtsr <= 5 Then
     dtsr = 0
     wysz_Qwzn "t2611.tab", msst, dtsr, cxs, Hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2621.tab", msst, dtsr, cxs, Hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2624.tab", msst, dtsr, cxs, Hb, zmwy
     lwzn = zmwy
  End If
  If dtsr > 5 And dtsr <= 15 Then
      dtsr = 10
     wysz_Qwzn "t2612.tab", msst, dtsr, cxs, Hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2622.tab", msst, dtsr, cxs, Hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2625.tab", msst, dtsr, cxs, Hb, zmwy
     lwzn = zmwy

 End If
 If dtsr > 15 And dtsr <= 25 Then
     dtsr = 20
     wysz_Qwzn "t2613.tab", msst, dtsr, cxs, Hb, zmwy
     qwzn = zmwy
     wysz_twzn "t2623.tab", msst, dtsr, cxs, Hb, zmwy
     twzn = zmwy
     wysz_lwzn "t2626.tab", msst, dtsr, cxs, Hb, zmwy
     lwzn = zmwy


  End If
End If ' zakres=1

If zakres = 2 Then
qwzn = 0
lwzn = 0
twzn = 0

End If   'zakres=2
```

```
    Picture1.Cls
    Picture1.Print " Wyniki: "; " : "
    Picture1.Print " Hbs"; "="; Str$(Hb); "[m]"
    Picture1.Print " Zakres pracy"; "="; Str$(zakres)




    Picture1.Print " Qwzn"; "="; Format$(qwzn, fmt$); "[kg]"
    Picture1.Print " Lwzn"; "="; Format$(lwzn, fmt$); "[km]"
    Picture1.Print " Twzn"; "="; Format$(twzn, fmt$); "[min]"
End If

End Sub

Sub Form_Load ()
r1 = False
r2 = False
r2 = True
zakres = Val(text2.Text)
End Sub
Sub Form_Activate ()
text4.Text = Str$(hc)

text4.SetFocus
pulap = 0

'************ cwiczenie
 ' wyszukaj z tablicy t263.tab
hrlnp = 0
 ' wyszukaj z tablicy t271.tab
zakres = 1
text2.Text = label1.Tag
text1.Text = Str$(pulap) + "[m]"
text3.Text = Str$(hrlnp) + "[m]"
label1.BackColor = &H808000
label2.BackColor = &HFFFFFF

End Sub

Sub Label1_Click ()
text2.Text = label1.Tag
r2 = True
zakres = Val(text2.Text)
label1.BackColor = &H808000
label2.BackColor = &HFFFFFF


End Sub
Sub Label2_Click ()
text2.Text = label2.Tag
r2 = True
zakres = Val(text2.Text)
label1.BackColor = &HFFFFFF
label2.BackColor = &H808000

End Sub
```

```
Sub Text1_KeyPress (keyascii As Integer)
 If keyascii = 13 Then
   r1 = True

   text3.SetFocus
  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
   If keyascii <> Asc(".") Then

     multibeep 10
     keyascii = 0
   End If
 End If

End Sub

Sub Text4_KeyPress (keyascii As Integer)
 If keyascii = 13 Then
   r1 = True
   Hb = Val(text4.Text)
   command3.SetFocus
  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
   If keyascii <> Asc(".") Then

     multibeep 10
     keyascii = 0
   End If
 End If

End Sub
```

UZBROJENIE.FRM

```
Dim rob(1 To 25, 1 To 2) As Double
Dim r1 As Integer
Dim r2 As Integer
Dim rob_il As Double
Dim rob_nr As Double
Dim masa_rob As Double
Dim CX_rob As Double
Dim i As Integer
Dim t As Integer
Dim zm2 As Double
Dim zm3 As Double
Sub Command1_Click ()
For t = 1 To i - 1
      rob_nr = rob(t, 1)
      rob_il = rob(t, 2)
      wysz_zm "t221.tab", rob_nr, zm2, zm3
      masa_rob = masa_rob + (rob_il * zm2)
      CX_rob = CX_rob + (rob_il * zm3)
Next t%
Mspst = masa_rob
cxs = CX_rob
picture1.Print "Mspst = "; Str$(Mspst); "kg"
picture1.Print "Cxs = "; Str$(cxs)


mousepointer = 11
'Unload uzbr
mousepointer = 0
```

```
End Sub
Sub Command2_Click ()

mousepointer = 11
Unload uzbr
mousepointer = 0

End Sub
Sub Form_Load ()
r1 = False
r2 = False
i = 1

End Sub
Sub Form_Activate ()
text1.SetFocus
End Sub
Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r1 = True
   rob_nr = Val(text1.Text)

   If r1 And r2 Then
     'obliczenia

        If i < 26 Then
          picture1.Print "Nr elementu = "; Str$(rob_nr);
          picture1.Print "    Ilość = "; Str$(rob_il)
          rob(i, 1) = rob_nr
          rob(i, 2) = rob_il
          i = i + 1
        End If
        r1 = False
        r2 = False
    text1.Text = ""
    text2.Text = ""

   End If
    text2.SetFocus

  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
    ' Beep
    ' KeyAscii = 0
  End If

End Sub

Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r2 = True
   rob_il = Val(text2.Text)

   If r1 And r2 Then
     'obliczenia
        If i < 26 Then
          picture1.Print "Nr elementu = "; Str$(rob_nr);
          picture1.Print "    Ilość = "; Str$(rob_il)
```

```
            rob(i, 1) = rob_nr
            rob(i, 2) = rob_il
            i = i + 1
          End If
          r1 = False
          r2 = False
      text1.Text = ""
      text2.Text = ""
      text1.SetFocus

    End If
    text1.SetFocus
  ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
     'Beep
     'KeyAscii = 0
  End If
 End Sub
```

WIATR.FRM

```
Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim r5 As Integer
Dim r6 As Integer
Dim r7 As Integer
Dim r8 As Integer
Dim r9 As Integer
Dim r10 As Integer
Dim r11 As Integer
Dim r12 As Integer
Dim r13 As Integer
Dim r14 As Integer
Dim r15 As Integer

Sub Command1_Click ()

If r1 And r2 And r3 And r4 And r5 And r6 And r7 And r8 And r9 And r10 And r11 And r12 And r13 And
r14 And r15 Then
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
r7 = False
r8 = False
r9 = False
r10 = False
r11 = False
r12 = False
r13 = False
r14 = False
r15 = False

    For i = 1 To 8
     picture1.Print wiatr_tab(i, 1); wiatr_tab(i, 2); wiatr_tab(i, 3)
    Next i
    'Przeliczenie tablicy na inne jednostki
```

```
    For i = 1 To 7
      wiatr_tab(i, 2) = ms_kmh(wiatr_tab(i, 2))
      wiatr_tab(i, 3) = Dm_Dn(wiatr_tab(i, 3))
    Next i
    For i = 1 To 8
      picture1.Print wiatr_tab(i, 1); wiatr_tab(i, 2); wiatr_tab(i, 3)
    Next i

End If

'mousepointer = 11
'Unload wiatr
'mousepointer = 0


End Sub

Sub Command2_Click ()
mousepointer = 11
Unload wiatr
mousepointer = 0


End Sub

Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
r5 = False
r6 = False
r7 = False
r8 = False
r9 = False
r10 = False
r11 = False
r12 = False
r13 = False
r14 = False
r15 = False
wiatr_tab(1, 1) = 1000
wiatr_tab(2, 1) = 3000
wiatr_tab(3, 1) = 5000
wiatr_tab(4, 1) = 7000
wiatr_tab(5, 1) = 9000
wiatr_tab(6, 1) = 11000
wiatr_tab(7, 1) = 13000

End Sub
Sub Form_Activate ()
text1(0).SetFocus

End Sub

Sub Text1_KeyPress (index As Integer, keyascii As Integer)
  If keyascii = 13 Then
    If index = 0 Then
      r1 = True
      wiatr_tab(1, 2) = Val(text1(index).Text)
```

```
  text1(index + 1).SetFocus
End If
If index = 1 Then
  r2 = True
  wiatr_tab(2, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 2 Then
  r3 = True
  wiatr_tab(3, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 3 Then
  r4 = True
  wiatr_tab(4, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 4 Then
  r5 = True
  wiatr_tab(5, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 5 Then
  r6 = True
  wiatr_tab(6, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 6 Then
  r7 = True
  wiatr_tab(7, 2) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 7 Then
  r8 = True
  wiatr_tab(1, 3) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 8 Then
  r9 = True
  wiatr_tab(2, 3) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 9 Then
  r10 = True
  wiatr_tab(3, 3) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 10 Then
  r11 = True
  wiatr_tab(4, 3) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 11 Then
  r12 = True
  wiatr_tab(5, 3) = Val(text1(index).Text)
  text1(index + 1).SetFocus
End If
If index = 12 Then
  r13 = True
  wiatr_tab(6, 3) = Val(text1(index).Text)
```

```
    text1(index + 1).SetFocus
  End If
  If index = 13 Then
    r14 = True
    wiatr_tab(7, 3) = Val(text1(index).Text)
    text1(index + 1).SetFocus
  End If
  If index = 14 Then
    r15 = True
    wiatr_tab(8, 1) = Val(text1(index).Text)
    text1(0).SetFocus
  End If




 ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then
   Beep
   keyascii = 0
 End If

End Sub
```

WITAJ.FRM

```
Dim rob(1 To 25, 1 To 2) As Double
Dim r1 As Integer
Dim r2 As Integer
Dim rob_il As Double
Dim rob_nr As Double
Dim masa_rob As Double
Dim CX_rob As Double
Dim i As Integer
Dim t As Integer
Dim zm2 As Double
Dim zm3 As Double

Sub Form_Load ()
r1 = False
r2 = False
i = 1

End Sub
Sub Form_Activate ()
text1.SetFocus
End Sub

Sub Command1_Click ()
 mousepointer = 11
 Load glowna
 mousepointer = 0
 Unload witaj

End Sub
Sub Form_Load ()
 mousepointer = 11
 Show
 mousepointer = 0
```

```
End Sub

WSPÓŁRZĘDNE.FRM

Dim r1 As Integer
Dim r2 As Integer
Dim r3 As Integer
Dim r4 As Integer
Dim i As Integer
Dim j As Integer
Dim btekst As String
Dim ltekst As String
Sub Command1_Click ()
mousepointer = 11
Unload wpr_dan2
mousepointer = 0
End Sub

Sub Command2_Click ()
'tab_pz(19, 1) = i - 1
'droga_lotu = 0
'If tab_pz(19, 1) > 1 Then
 ' For i = 1 To tab_pz(19, 1) - 1
  '  droga_lotu = droga_lotu + Sqr(((tab_pz(i + 1, 1) - tab_pz(i, 1)) ^ 2) + ((tab_pz(i + 1, 2) - tab_pz(i,
2)) ^ 2))


  'Next i
' End If
' For i = 1 To 1000
' Next i
mousepointer = 11
Load zwroty
mousepointer = 0
zwroty.Show


End Sub
Sub Form_Load ()
r1 = False
r2 = False
r3 = False
r4 = False
i = 1
j = 1
text4.Text = " 1.Lotnisko startu "
picture1.Cls
End Sub

Sub Text1_KeyPress (keyascii As Integer)
 If keyascii = 13 Then

    r1 = True
    btekst = text1.Text
     text4.Text = " Współrzędna poprawna "
     text2.SetFocus
    If r1 And r2 And r3 And r4 Then
      text4.Text = "2.Lotnisko lądowania"
      label9.Caption = "Podaj kurs lotniska lądowania w stopniach = "
```

```
'obliczenia
    If i < 3 Then
      b = zam_na_st(btekst)
      l = zam_na_st(ltekst)

      zam_bl_na_xy b, l
      tab_pz(i, 1) = x
      tab_pz(i, 2) = y
      tab_pz(i, 9) = b
      tab_pz(i, 10) = l
      tab_kat_lot(i, 1) = pl
      tab_kat_lot(i, 2) = fi_lot_st



      picture1.Print " Punkt "; Str$(i); " : "
      picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
      picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
      picture1.Print " pl"; Str$(i); "="; Str$(pl); "[hPa]"
      picture1.Print " kat_lotniska"; Str$(i); "="; Str$(fi_lot_st); "[st]"


      i = i + 1

     End If



r1 = False
r2 = False
r3 = False
r4 = False
   End If


  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then

If keyascii <> Asc("-") Then
  ' multibeep 10
  ' text4.Text = " Uwaga błąd !!! "
  ' keyascii = 0
  End If

 End If


End Sub
Sub Text1_KeyPress (keyascii As Integer)
 If keyascii = 13 Then

   r1 = True
   btekst = text1.Text
    text4.Text = " Współrzędna poprawna "
    text2.SetFocus
   If r1 And r2 And r3 And r4 Then
     text4.Text = "2.Lotnisko lądowania"
     label9.Caption = "Podaj kurs lotniska lądowania w stopniach = "

     'obliczenia
         If i < 3 Then
```

```
        b = zam_na_st(btekst)
        l = zam_na_st(ltekst)

        zam_bl_na_xy b, l
        tab_pz(i, 1) = x
        tab_pz(i, 2) = y
        tab_pz(i, 9) = b
        tab_pz(i, 10) = l
        tab_kat_lot(i, 1) = pl
        tab_kat_lot(i, 2) = fi_lot_st



        picture1.Print " Punkt "; Str$(i); " : "
        picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
        picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
        picture1.Print " pl"; Str$(i); "="; Str$(pl); "[hPa]"
        picture1.Print " kat_lotniska"; Str$(i); "="; Str$(fi_lot_st); "[st]"


        i = i + 1

       End If



  r1 = False
  r2 = False
  r3 = False
  r4 = False
End If
   End If


  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then

If keyascii <> Asc("-") Then
  ' multibeep 10
   ' text4.Text = " Uwaga błąd !!! "
   ' keyascii = 0
   End If

 End If


End Sub
Sub Text3_KeyPress (keyascii As Integer)
 If keyascii = 13 Then

    r3 = True
    pl = Val(text3.Text)
     text4.Text = " Współrzędna poprawna "
     text5.SetFocus
    If r1 And r2 And r3 And r4 Then
     text4.Text = "2.Lotnisko lądowania"
     label9.Caption = "Podaj kurs lotniska lądowania w stopniach = "

     'obliczenia
         If i < 3 Then
           b = zam_na_st(btekst)
           l = zam_na_st(ltekst)
```

```
        zam_bl_na_xy b, l
        tab_pz(i, 1) = x
        tab_pz(i, 2) = y
        tab_pz(i, 9) = b
        tab_pz(i, 10) = l
        tab_kat_lot(i, 1) = pl
        tab_kat_lot(i, 2) = fi_lot_st



        picture1.Print " Punkt "; Str$(i); " : "
        picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
        picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
        picture1.Print " pl"; Str$(i); "="; Str$(pl); "[hPa]"
        picture1.Print " kat_lotniska"; Str$(i); "="; Str$(fi_lot_st); "[st]"


        i = i + 1

       End If



  r1 = False
  r2 = False
  r3 = False
  r4 = False
End If


 ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then

  If keyascii <> Asc("-") Then
  ' multibeep 10
  ' text4.Text = " Uwaga błąd !!! "
  ' keyascii = 0
  End If

 End If


End Sub
Sub Text5_KeyPress (keyascii As Integer)
 If keyascii = 13 Then

    r4 = True
    fi_lot_st = Val(text5.Text)
     text4.Text = " Współrzędna poprawna "
     text1.SetFocus

    If r1 And r2 And r3 And r4 Then
     text4.Text = "2.Lotnisko lądowania"
     label9.Caption = "Podaj kurs lotniska lądowania w stopniach = "

     'obliczenia
         If i < 3 Then
           b = zam_na_st(btekst)
           l = zam_na_st(ltekst)
```

```
        zam_bl_na_xy b, l
        tab_pz(i, 1) = x
        tab_pz(i, 2) = y
        tab_pz(i, 9) = b
        tab_pz(i, 10) = l
        tab_kat_lot(i, 1) = pl
        tab_kat_lot(i, 2) = fi_lot_st



        picture1.Print " Punkt "; Str$(i); " : "
        picture1.Print " X"; Str$(i); "="; Str$(x); "[km]"
        picture1.Print " Y"; Str$(i); "="; Str$(y); "[km]"
        picture1.Print " pl"; Str$(i); "="; Str$(pl); "[hPa]"
        picture1.Print " kat_lotniska"; Str$(i); "="; Str$(fi_lot_st); "[st]"


        i = i + 1

       End If



  r1 = False
  r2 = False
  r3 = False
  r4 = False
End If
```

```
  ElseIf (keyascii < Asc("0") Or keyascii > Asc("9")) Then

   If keyascii <> Asc("-") Then
    multibeep 10
    text4.Text = " Uwaga błąd !!! "
    keyascii = 0
   End If

 End If

End Sub
```

WYJŚCIE.FRM

```
Sub Command1_Click ()
End
End Sub
Sub Command2_Click ()
mousepointer = 11
Unload wyjscie
mousepointer = 0

End Sub
```

ZBIÓRKI.FRM

```
Dim r1 As Integer
Dim r2 As Integer
```

```
Dim poz As Integer
Dim poz1 As Integer
Sub Command1_Click ()
 If text2.Text = 1 Then
    mousepointer = 11
    Load zbiorki1
    mousepointer = 0
    zbiorki1.Show
  Else
    mousepointer = 11
    Load zbiorki2
    mousepointer = 0
    zbiorki2.Show
  End If

End Sub

Sub Command2_Click ()
   mousepointer = 11
   Unload zbiorki
   mouseponter = 0

End Sub
Sub Form_Load ()
r1 = False
r2 = False

poz = 0
poz1 = 1

label(poz).BackColor = &H808000
text1.Text = label(poz).Tag


label1(poz1).BackColor = &H808000
text2.Text = label1(poz1).Tag

End Sub
Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub
Sub Label1_Click (index As Integer)
label1(poz1).BackColor = &H80000005
label1(index).BackColor = &H808000
text2.Text = label1(index).Tag
poz1 = index

End Sub

Sub Text1_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

    r1 = True

    liczba_sam = Val(text1.Text)
    If liczb_sam = 3 Then
```

```
    liczba_sam = 4
  End If


 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   Beep
   KeyAscii = 0
 End If



End Sub
Sub Text2_KeyPress (KeyAscii As Integer)
 If KeyAscii = 13 Then

   r2 = True
   warunki_atm = Val(text2.Text)


 ElseIf (KeyAscii < Asc("0") Or KeyAscii > Asc("9")) Then
   Beep
   KeyAscii = 0
 End If
End Sub

ZBIÓRKI1FRM
Dim poz As Integer
Sub Command1_Click ()
mousepointer = 11
Unload zbiorki1
Unload zbiorki
mousepointer = 0

End Sub

Sub Command2_Click ()
mousepointer = 11
Unload zbiorki1
mousepointer = 0

End Sub
Sub Form_Activate ()
poz = 0
label(0).BackColor = &H808000
text1.Text = label(poz).Tag
End Sub
Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index
End Sub

ZBIÓRKA.FRM
Dim poz As Integer
Sub Command1_Click ()
mousepointer = 11
```

```
Unload zbiorki2
Unload zbiorki
mousepointer = 0

End Sub
Sub Command2_Click ()
mousepointer = 11
Unload zbiorki2
mousepointer = 0
End Sub
Sub Form_Activate ()
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub

Sub Label_Click (index As Integer)
label(poz).BackColor = &H80000005
label(index).BackColor = &H808000
text1.Text = label(index).Tag
poz = index

End Sub
```

BIBLIOTEKA GŁÓWNA - ARCHIWUM
Nr ewid. 54854
Akademii Obrony Narodowej