DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL ENGINEERING

AREA ANALYSIS WORKSHEET

I. GENERAL LOCATION DATA		
1. Name of Area Analyzed	**2. Time Period of Operation**	**3. Latitude:**
	Start of Operation:	
		4. Longitude:
	Planned Length of Operation:	
	Summer: A M J J A S	**5. Elevation:**
	Winter: O N D J F M	
	(CIRCLE APPROPRIATE MONTHS)	

II. MAPS AND IMAGERY	
1. Sensor Data	
A. Platform Type:	***B. Platform Type:***
Name:	Name:
Active or Passive (Circle one)	Active or Passive (Circle one)
Spatial Resolution:	Spatial Resolution:
Spectral Resolution:	Spectral Resolution:
Temporal Resolution:	Temporal Resolution:
2. Image and Map Analysis	
A. Map/UTP # 1 Name:	***D. Image # 1 Name:***
Date:	Date:
Scale (map):	Scale (if printed):
B. Map/UTP # 2 Name:	***E. Image # 2 Name:***
Date:	Date:
Scale (map):	Scale (if printed):
C. Map/UTP # 3 Name:	***F. Image # 3 Name:***
Date:	Date:
Scale (map):	Scale (if printed) :
NOTE: UTP = Urban Tactical Planner	

ANALYST'S NAME / INITIALS:	DATE PREPARED:	EV203 PHYSICAL GEOGRAPHY AREA ANALYSIS STUDY

III. WEATHER AND CLIMATE

1. Operational Information

A. Day Length at start of operation (in hrs/mins):	***B. Is amount of daylight increasing or decreasing over the next month?*** ***INCREASING / DECREASING*** ***Explain:***

2. Weather Information

A. Dominant Atmospheric Lifting Mechanism(s):	***B. Major Global Circulation Model (GCM) Component Influence:***
(1)	(1) Summer (CIRCLE ALL THAT APPLY): ITCZ STH POLAR FRONT POLAR HIGH
(2)	(2) Winter (CIRCLE ALL THAT APPLY): ITCZ STH POLAR FRONT POLAR HIGH
(3)	

C. Air Mass Influence: circle appropriate symbol(s)

(1) January	(2) July
mE mT cT mP cP cA cAA	**mE mT cT mP cP cA cAA**
Is this an Air Mass Source Region (CIRCLE ONE) ? Yes or No	Is this an Air Mass Source Region (CIRCLE ONE) ? Yes or No

D. Local Weather Systems: Discuss any potential weather systems and likely season of occurrence.

(1) Tropical Cyclone:

(2) Tornado:

(3) Midlatitude Wave Cyclone (Fronts):

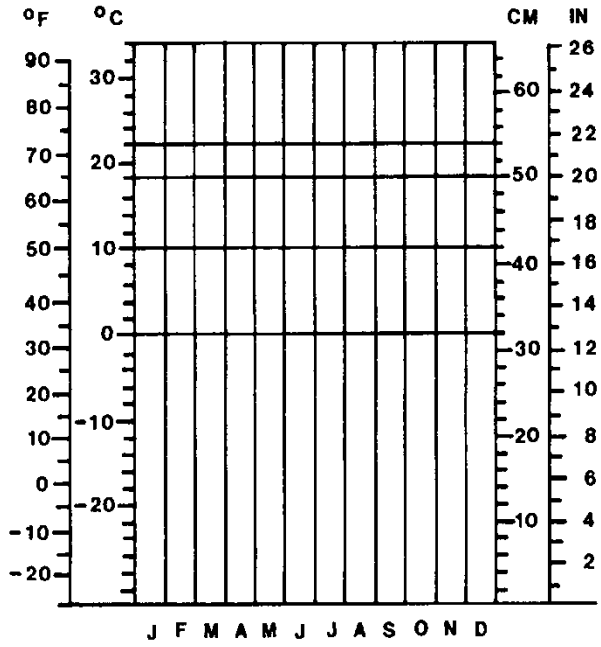
(4) Convective Thunderstorm:

3. Regional/Local Climate Data

A. Regional Climate Classification

(1) Symbol:	(2) Description:

B. Local Climograph



C. Weather Station Data and Classification

(1) Name and Title:	(6) Winter Precipitation (include percent of total):
(2) Latitude / Longitude:	(7) Mean Annual Temp:
(3) Elevation:	(8) Prevailing Wind (Jan):
(4) Total Precipitation:	(9) Prevailing Wind (Jul):
(5) Summer Precipitation (include percent of total):	(10) Annual Temp Range:

D. Local Climate Classification (symbol):	***E. Local Climate Description:***	***F. Is the weather station representative of the climate in your AO?***
		YES / NO (circle one)

4. Climate Data Analysis and Assessment

A. Climate Controls - Identify and discuss the major climate controls that affect the area's climate, evaluating all appropriate controls.

(1) Insolation (Latitude):	(2) Pressure (Latitude):	(3) Ocean Currents:
(4) Continental or Maritime Influence:	(5) Altitude:	(6) Topographic Barriers:

B. Assessment - Review the climate data in sections A and B. Assess the potential impact of the climate on your operations.

(1) Personnel:

(2) Equipment and Maintenance:

(3) Operations (air and ground):

IV. VEGETATION

1. Biome (s) (choose the most closely related biome from the map of ecoregions in GWA)

A. Name:	***B. Description:***

C. Deciduous Vegetation Only:

Loss of canopy caused by (circle one): Dry Season / Cold Winter

Inclusive months of canopy loss (circle one or more):

J F M A M J J A S O N D

2. Local Vegetation Data in AO (circle all that apply)

Forest	Woodland
Shrubland	Scrub
Grassland	Orchard
Agricultural	Wetland/Swamp
Scattered Trees	Rain Forest
Vineyards	Plantation
Marsh	Mangrove
Rice Paddy	Tundra
Other:	

3. Vegetation Matrix and Mobility Assessment Along Any Planned Cross-Country Route (overlay data)

VEGETATION TYPE	MOBILITY RATING	
(From overlay & Part IV.2. above)	WHEELED VEHICLES	TRACKED VEHICLES
	GO NOGO	GO NOGO
	GO NOGO	GO NOGO
	GO NOGO	GO NOGO
	GO NOGO	GO NOGO
	GO NOGO	GO NOGO
OVERALL RATING	GO NOGO	GO NOGO

4. Vegetation Analysis Assess the impact of vegetation on your operation based on data in this section and your climograph. Address concealment and/or cover considerations in your analysis.

V. SOILS AND TOPOGRAPHY

1. Major Pedogenic Regime (with the exception of C Climates):

2. Soil Trafficability Assessment Along Any Planned Cross-Country Route (overlay data)

SOIL TYPE ON ROUTE/AO	Trafficability Rating **Dry Conditions**	Trafficability Rating **Moist Conditions**	Trafficability Rating **Fully Saturated Conditions**
	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO
	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO
	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO
	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO
	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO
OVERALL RATING	FAIR POOR NOGO	FAIR POOR NOGO	FAIR POOR NOGO

3. Slope

Identify and determine the steepest slope on the route.

Slope (%):

Wheeled Vehicles: GO / NOGO (circle one)

Tracked Vehicles: GO / NOGO (circle one)

4. Analysis

A. Based on the data given in this section & your climograph, circle which months would you anticipate the ***least*** favorable trafficability?	***B.*** Based on the data given in this section & your climograph, circle which months would you anticipate the ***most*** favorable trafficability?
J F M A M J J A S O N D N/A	**J F M A M J J A S O N D N/A**

C. What impact may soils and slope have on potential operations in the area?

VI. GEOMORPHOLOGY

1. Plate Tectonics (if AO could be affected by or is astride a plate boundary)

A. Boundary Type: (circle one)	***B. Names and Types of Plates:***	***C. Resulting Distinct Landforms:***
Divergent Convergent Transform		

D. Draw a Cross-Sectional Diagram of the Plate Boundary:

2. Geomorphic Hazards

A. Earthquake Potential (if applicable):	*B. Volcanic Activity (if applicable):*
(1) Historic Activity: (2) Probable Fault Type (based on tectonic activity): (3) Tsunami Potential:	(1) Historic Activity: (2) Type of Volcanoes and Eruptions: (3) Location and Orientation of Lava Fields:
C. Mass Wasting Hazards (if applicable):	***D. Dominant Weathering Process (circle one) & Explain:***
(1) (2) (3)	(1) Chemical: (2) Physical: (3) Both:

3. Hydrologic Features (if applicable)

A. Rivers and streams that may affect operations (major features ***only*** from current maps and images)

(1) Name/Stream Type:	(2) Channel Width:	(3) Floodplain Width:

B. Other hydrographic features that may affect operations (major features ***only*** from current maps and images)

(1) Lakes:	(2) Swamps/Marshes:	(3) Periodically Inundated Areas:	(4) Other:

(5) Based on the climate data, what month(s), if any, do you expect high water levels and flooding associated with these features?

J F M A M J J A S O N D N/A

Explain:

4. Coastal Features (if applicable)

A. Tidal Data	*B. Wave Data (if available)*	*C. Human-Made Features*	*D. Natural or Human-Made Obstacles/Hazards*

5. Arid Features (if applicable)

A. Springs / Wells / Oases:	*B. Major Dune Fields:*	*C. Location of Major Wadis:*

6. Glacial Features (if applicable)

A. Glaciers (by type):	*B. Types of Moraines:*	*C. Outwash Plain:*	*D. Other:*

VII. HUMAN LANDSCAPE AND CULTURE

1. General Data of Political Landscape

A. Name of State:	*B. Capital and Location:*	*C. Form of Government:*	*D. State Shape:*
E. Area of State:	*F. Political Boundary Type(s)*	*G. Major Boundary Dispute(s)*	*H. External Threats/Enemies*

2. Demographic Data

A. Population Facts: from GWA and/or Encarta	*B. Population Density*
(1) Total Population: (2) Population Growth Rate: (3) Demographic Transition Model Phase: (4) Literacy Rate:	(1) Population Density (arithmetic): (2) Population Density (physiologic) (only if data allows calculation): (3) Percent Urban: (4) Percent Rural:
	C. Languages:
D. Major Urban Areas (name & population) (list top four): (1) (2) (3) (4)	*E. Ethnic Groups:*
	F. Religion(s):

G. Identification of Major Centrifugal or Centripetal Forces:

H. Impact of Demographic Factors:

3. Economic Data

A. Per Capita Income:

B. Industries:	***C. Agriculture:***	***D. Natural Resources (list):***
% Population in Industry: % Population in Service Sector: Main Industry:	% Population in Agriculture: Main Crops: Impact of climate on agriculture (types of crops):	

4. Civil/Internal Conflict (groups and nature of the conflict)

A. Ethnic:	***B. Religious:***	***C. Political:***

D. Impacts of Civil/Internal Conflicts

(1) Effects on Population:	(2) Effects on Economy:	(3) Effects on Infrastructure:	(4) Displacement of People:

VIII. MEDICAL

1. Diseases in the Area of Operations (from Country Study)	**2. Impact of the Triangle of Human Ecology**
A. Endemic Diseases: Identification: General Location: ***B. Epidemic Diseases:*** Identification: General Location:	***A. Population Issues (Age, Gender, Genetics):*** ***B. Behavior Issues (Technology, Beliefs, Social Organization):*** ***C. Habitat Issues (Natural, Social, Built):***

3. Medical Impacts of Environment in the AO	4. Medical Care	
A. Climate (ex: extreme temperatures, excess moisture):	***A. Location of Major Hospitals:***	***C. Describe the Civilian Health Care System:***
B. Disease (vectors, parasites):		
C. Hygiene Issues (of populace and military unit):	***B. Number of doctors per 100,000 people:***	
D. Water Supply (type and quality):		

IX. TRANSPORTATION FACILITIES/NETWORKS

1. Roads	2. Rail Lines
A. Major Roads (multi-lane, all weather, hard surface):	***A. Normal Gauge Rail Lines:***
- Identification:	- Single Track (identify and specify direction)
- General Direction:	- Multi-Track (identify and specify direction)
- Street pattern of major urban areas (Ex: radial, radial ring, chessboard/rectangular, etc.)	***B. Light Gauge Rail Lines (identify and specify direction):***
B. Minor Roads (all weather, loose or hard surface):	***C. Is entire area of operations served by rail network?***
- Identification:	
- General Direction:	
C. Is entire area of operations served by an all-weather road network? If not, what areas are not accessible?	

<table>
<tr><td>3. Port Facilities and Navigable Waterways</td><td colspan="2">4. Airfields (major commercial and military airfields in AO)</td></tr>
<tr><td rowspan="2">A. Major Ports
- Identification:

- Link to Interior (road/rail/navigable waterways):

B. Navigable Waterways
- Rivers:

- Canals:</td><td>A. Name:
Location:

Aircraft: (circle)
C130J C17A C5B
KC10C KC135 C27A</td><td>B. Name:
Location:

Aircraft: (circle)
C130J C17A C5B
KC10C KC135 C27A</td></tr>
<tr><td>C. Name:
Location:
Aircraft: (circle)
C130J C17A C5B
KC10C KC135 C27A</td><td>D. Name:
Location:
Aircraft: (circle)
C130J C17A C5B
KC10C KC135 C27A</td></tr>
<tr><td colspan="3">X. OTHER AREA ANALYSIS STUDY NOTES:</td></tr>
<tr><td colspan="3"></td></tr>
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