YUKON
Economic Development
Mineral Resources Branch

The Whitehorse Copper Belt:
Fall 1997 Limited Geophysical Assessment

J.W.F. Mitchell, P.Geo., P.Geoph.
E³ TERRAPHYSICS
Nanaimo, B.C. Canada

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1.0 Introduction and Summary

E3 TerraPhysics of Nanaimo, B.C., in association with Amerok Geosciences Ltd. of Whitehorse, Y.T. was approached in summer of 1997 by the Yukon Territorial Government - Mineral Resources Branch, to perform a limited geophysical assessment of the Whitehorse Copper Belt. The project was to be a component of a larger effort to identify the geographic distribution of mineral potential in the Copper Belt to assist the City of Whitehorse in land use decisions.

A mass of proprietary historical data was supplied by Hudson Bay Exploration and Development Co. Ltd. of Vancouver, B.C. After an assessment phase a subset of the data was selected for analysis. This report constitutes an interpretation of the geographic distribution of mineral potential based on this limited data subset.

Based upon a detailed examination of this data subset, 28 polygons of potential mineral development interest were defined within the greater map area. These polygons were assessed and ranked according to a range of variables. **Table 1** summarizes the relative mineral potential ranking of the polygons.

Table 1.

Rank	Polygon	Score	Rank	Polygon	Score
1	AEM2E-4	15.1	15	AEM2E-1	6.4
2	AEM1E-3	13.7	16	AEM1E-19	6.3
3	AEM2E-5	12.4	17	AEM1E-6	5.6
4	AEM1E-10	12.3	18	AEM1E-20	5.5
5	AEM1E-9	12.2	19	AEM2E-8	5.4
6	AEM2E-2	11.9	20	AEM1E-14	4.5
7	AEM1E-2	11.9	21	AEM1E-1	4.0
8	AEM2E-3	9.0	22	AEM1E-17	3.0
9	AEM2E-6	8.8	23	AEM1E-8	2.9
10	AEM1E-7	8.2	24	AEM1E-16	2.9
11	AEM1E-4	7.7	25	AEM1E-11	2.5
12	AEM1E-5	7.3	26	AEM1E-15	2.3
13	AEM1E-13	7.2	27	AEM1E-12	1.9
14	AEM2E-7	6.5	28	AEM1E-18	0.6

Map 1 and **Map 2** attached, show the locations of the polygons.

2.0 Geologic Setting

The geology of the Whitehorse Trough and the Whitehorse Copper Belt has been studied and reported in past by various authors (Wheeler, 1961, Kindle, 1964) while local skarn deposits have been more thoroughly examined by Morrison, 1981. An additional treatment of the Copper Belt area including the mining and exploration history to 1980, was delivered by Tenney, 1980.

At the 1:50,000 scale of the available geologic references, some deposit characteristics of geophysical significance as reported by Tenney are:

1. There are two distinct types of skarn in which economic mineral deposits occur; iron-rich and calcsilicate-rich.

2. Ore bodies occur mainly within limestones of the Lewes River Group, adjacent to or within a few hundred feet of diorite contacts. Ore is associated with irregularities in the diorite contact and the largest deposits occur within roof or flank pendants.

3. With the exception of Black Cub South, ore is not associated with strongly graphitic limestone.

4. Most ore zones have irregular boundaries and vary in width and grade over short distances, but they are generally tabular and oriented parallel to bedding.

5. Calcsilicate skarn ore bodies are associated with a relatively magnetic diorite, whilst serpentine-magnetite skarns are associated with relatively non-magnetic diorite.

6. Iron rich skarns are characterized by high content of associated magnetite and valleriite. They are generally strongly sheared and faulted and may be intruded by numerous dykes.

7. Calcsilicate skarns have little or no serpentine or magnetite, and no valleriite. They are generally less sheared and faulted than the iron rich skarns.

8. The Miles Canyon Basalt, a Tertiary-age volcanic, has been considered responsible for uniformly high magnetic readings in some areas.

3.0 Historical Geophysical Behaviour

There exists a considerable database of geophysical responses associated with the known mineral deposits. For the present approach and scale of the project it was considered most effective to rely on this history in preference to detailed theoretical modelling. Tenney summarizes well the results of the most common geophysical exploration methodologies.

Magnetic Methods Most iron-rich, magnetite skarn deposits have commonly shown magnetic peak readings in the order of 10000 gammas or better above background values. The Arctic Chief W. deposit, for example was reported to have anomalous peak values of 30000 gammas. Though iron-poor, the calcsilicate skarns have nonetheless generally shown anomalous magnetic readings in the order of 1000 to 2000 gammas. In at least one instance however, at the War Eagle deposit, the absence of magnetic mineralization in proximity to a relatively magnetic diorite produced anomalously low values in the order of 200 gammas *below* background levels. **Appendix Table 2** summarizes historical Magnetometer results for most of the deposits known to 1980.

Induced Polarization Induced Polarization surveys have generally always shown anomalous chargeability values ranging from weak to very good. The success of this technique resulted in it's becoming standard procedure within the Copper Belt. Some of the apparent range in absolute values may be due to differences in equipment and methodologies employed by the various contractors over the years. Since many other geologic settings and rock types can produce chargeability highs it has been necessary to attempt to distinguish skarn deposits through supportive evidence of size, shape, contrast, local geology and magnetic coincidence. **Appendix Table 3** summarizes historical Induced Polarization chargeability results for most of the deposits known to 1980.

Electromagnetic Methods From Induced Polarization surveys it has been indicated that both skarn types are generally weakly conductive at best. Electromagnetic techniques have shown limited usefulness as a direct method of deposit exploration. While higher frequency instruments have shown anomalous values over known deposits, such frequencies tend to limit the effective depth of exploration as well as eliciting strong responses in a wide range of other rock and overburden types, and even topography. Despite these drawbacks, VLF-Electromagnetic mapping has been used extensively due to it's speed and low cost. Additionally, there are indications that Airborne EM produces anomalous responses in areas of favourable geology surrounding most of the known deposits.

4.0 HBED Dataset Description

4.1 General Description of the available data.

Available data consisted of copies of approximately 30 years of collected surveys, reports and notes. Geophysical techniques included Induced Polarization(IP), Total Magnetic Field(MAG), Airborne Electromagnetics(AEM) and Very Low Frequency Electromagnetic(VLF-EM). Survey coordinates were most often given only as Line and Station data on grids and sub-grids irregularly referenced to the larger New Imperial Mines (NIM) Grid. Survey parameters were poorly documented on average and the majority of the data appeared to be field or intermediate products at a range of Imperial scales. While IP data constituted the bulk of the information this data was also the most irregular with respect to location, age, contractor and scale. It was learned that much of the data had been gathered 'in-house' and was unaccompanied by final reports or drawings.

4.2 Data subset selection rationale.

The volume of available data required limiting in the interest of time. Registration of any data to a NAD 1927 UTM reference coordinate system was a time-intensive, multi-step process.

The geographically largest self-consistent data set was a 1981? Airborne Electromagnetic and Magnetic survey. This survey was selected in the belief that both mineral targets and favourable geology would exhibit conductivity contrasts adequate to produce EM anomalies. Magnetic anomalies have been historically detected for skarn formations with significant magnetite mineralization (Tenney, 1980). The data consisted of two maps of interpreted EM anomalies measured at different flight line orientations. EM anomalies were represented by map symbols showing the location of an anomalous response and a rating of the apparent conductivity from doubtful to good. Additional symbology indicated significant cultural noise levels as well as any interpretation of coincidence with a magnetic anomaly. The EM maps were minimally referenced to Latitude and Longitude. Three separate map sheets showed what was presumed to be coloured contours of magnetic data, devoid of any identifying coordinate references and badly reproduced in black and white.

A second data set was selected in recognition of the historical basis for correlation of IP chargeability anomalies with most known skarns in the area. A 1975 survey conducted by Geoterrex was selected as the geographically largest, self-consistent IP data set. This data consisted of Line and Station data from five discrete survey areas, designated as GT75-R2 to GT75-R6 and shown as polygon outlines on the appended **Map 1**.

For geographic reference purposes it was necessary to rely on a third map of unknown vintage for location of the IP dataset. This map showed the location of named sub-grids and their relationship to the larger NIM Grid. The Whitehorse Reference Traverse was also shown, an important key to UTM registration.

Determinations of geologic setting relied on a fourth component, the 1:50,000 - 1990 Dept. of Indian and Northern Affairs Canada, Geological Map of Whitehorse (105D/11) Map Area.

4.3 Data set limitations.

Several aspects of the data set being employed imply biases which are not considered correctable in the absence of sufficient documentation or additional information. These include but are not limited to the following:

uncertainty in the original interpretation. Documentation on the airborne survey parameters, equipment and the original process of quantifying conductivity 'hits' was unavailable. Magnetic coincidence and the interpreted influence of cultural noise were accepted at face value. Resolution noise was likewise viewed. The means and reliability of survey flight elevation and positioning control are unknown.

limited spatial coverage. Partial overlap of flight line coverage results in a bias towards those areas of overlap. Induced polarization surveys examined covered a relatively small portion of the total map area. The absence of data in many areas results in a bias against those areas.

limited spatial density. Mean flight line spacing was reported as 200 meters. The small size of most of the known deposits in conjunction with considerable drift in the airborne survey flight paths suggests that an unknown number of deposits could have been left unsurveyed. Of the IP surveys included, 4 out of 5 employed line spacing of 400 feet.

geologic uncertainty. The limestone/intrusive contact is not believed to be well known in many areas. Quaternary sediments obscure large portions of the area of interest.

the exact correlation of airborne EM anomaly clusters to local mineral deposits is undetermined.

5.0 Discussion of Anomaly Polygon Mapping

The large total number of airborne EM conductivity 'hits' precluded the possibility of individual treatment. In general, anomalies tended to clustering thus allowing the drawing of inclusive polygon boundaries falling on or within the Whitehorse City Limits. A total of 28 polygons included approximately 80% of the total number of conductivity 'hits' within City Limits and better than 97% of those rated as 'moderate conductivity' or better. Polygons ranged in size from ~28 to ~488 hectares for a total of ~4524 hectares. Boundaries were on average drawn 200 to 300 meters outside of the clusters. The location of known deposits was overlaid and it was observed that 17 occurrences coincided with 8 anomaly clusters. This was taken as supporting evidence that airborne EM clusters may have been associated with some characteristic of favourable geology.

The available IP profiles were examined and interpreted. Due to the lack of survey parameter documentation for many , these interpretations were given relatively lesser weightings than the historical data correlation suggests was due. This dataset was not considered to have a high confidence level, in addition to being severely spatially limited both in area and density of coverage.

While a separate, thorough interpretation of the ambiguous magnetic data was not attempted, an effort was made to confirm that the magnetic coincidence symbology employed on the EM maps was supported by the data. The general correlation appeared satisfactory within the limitations of the positioning and display uncertainties.

6.0 Anomaly Screening Procedure

6.1 Mineral Resource Potential Grading of AEM Anomaly Polygons

Polygons of potential mineral exploration interest were ranked according to the following criteria:

<u>Geologic setting (GS)</u>
favourable geology was rated highly, scores of 0 to 3 were used and subsequently weighted by a factor of 2.

<u>Occurrence of Mineralization (OM)</u>
known mineralizations added 1 for each occurrence.

<u>AEM Anomaly Density (AD)</u>
the number and strength of airborne 'hits' within a polygon was used to calculate a relative density number, considered indicative of average local conductivity. Resultant scores ranged from 1.3 to 11.7 before weighting by a factor of one-half.

<u>Magnetic Coincidence (MC)</u>
an interpretation of magnetic coincidence contributed 1 for each occurrence.

<u>Flight Direction Coincidence (FC)</u>
response clusters coincident on both flight line maps scored 1 for each of the overlapping polygons.

<u>Linear Trends (LT)</u>
apparent multi-line trends were considered indications of favourable conductivity and depositional geometry. Score 0 or 1.

<u>Cultural Noise (NC)</u>
polygons were screened for either interpreted or suspected cultural responses and given negative scores from 0 to -3.

<u>Resolution Noise (NR)</u>
previous interpretations of resolution noise downgraded scores from 0 to -1.

Anomalous IP Chargeability (IP)
indications of anomalous IP chargeability values contributed a factor of 0 to 2 to the total score for each occurrence. Survey uncertainties downgraded the weight of what should otherwise have been considered a strongly significant factor.

After weighting the ranges of the two factors considered most significant, those of Geologic Setting and Anomaly Density, category scores were summed and a final score was computed which produced an ordered ranking of the 28 polygons.

Table 1 details the relative ranking of the 28 AEM polygons.

Table 1.

Rank	Polygon	Score	Rank	Polygon	Score
1	AEM2E-4	15.1	15	AEM2E-1	6.4
2	AEM1E-3	13.7	16	AEM1E-19	6.3
3	AEM2E-5	12.4	17	AEM1E-6	5.6
4	AEM1E-10	12.3	18	AEM1E-20	5.5
5	AEM1E-9	12.2	19	AEM2E-8	5.4
6	AEM2E-2	11.9	20	AEM1E-14	4.5
7	AEM1E-2	11.9	21	AEM1E-1	4.0
8	AEM2E-3	9.0	22	AEM1E-17	3.0
9	AEM2E-6	8.8	23	AEM1E-8	2.9
10	AEM1E-7	8.2	24	AEM1E-16	2.9
11	AEM1E-4	7.7	25	AEM1E-11	2.5
12	AEM1E-5	7.3	26	AEM1E-15	2.3
13	AEM1E-13	7.2	27	AEM1E-12	1.9
14	AEM2E-7	6.5	28	AEM1E-18	0.6

6.2 Polygon Descriptions.

Appendix Table 4 details the individual scoring of the 28 polygons in each of 15 categories. This serves to describe the physical and interpreted characteristics of each polygon with respect to dimensions, area, number and type of airborne EM hits, noise, linear trends etc. Attached **Plates 1** to **7** show copies of the 28 polygons excised from the Airborne EM maps and reproduced at 1:25000 scale.

6.3 Induced Polarization Dataset Summaries - see **Map 1** for grid locations.

GT75-R2 War Eagle S.
The best of the IP data for quality and completeness. Profiles and contour maps for electrode spacing n=1 and n=3. Well documented. 11 lines, nominally 2000 ft. at 200 ft. spacing (lines and stations), oriented square to the NIM grid, chargeabilities generally high on the West side, values of 30-80 ms/s. Values lower to the South (15-20) and East (15-

30) Lobe-like high trend extending through E middle portion from North, centred around Line 52N and station 26W, values typically 40-60, peak of 72.

GT75-R3 War Eagle N.

Poorly documented, displays appear as field quality only. Survey and display details absent. 9 profile lines for an unknown 'n' electrode spacing parameter, spaced at 400 ft, stations at 100 ft. Chargeability values range from 10-20 in the south to 10-30 in the north. Highest gradients appear on Lines 148N and 152N near Station 12E and may be slightly anomalous.

GT75-R4 Best Chance S.

Fairly well documented, 30 profiles with pseudosections, 8 oriented NW-SE from the W area of the grid, 22 oriented SW-NE covering a larger area with overlap. Lines spaced at 200 ft in the NW, 400 ft in the SE, stations at 200 ft. Clearly anomalous values in the north and south parts of the grid with correlation with several known mineral occurrences (Best Chance, Grafter, Retribution, Verona and Arctic Chief pit).

GT75-R5 Little Chief

23 poorly documented SW-NE profile plots, one electrode spacing only, 400 ft line spacing by 100 ft stations. Field plots only plus one contour plot for chargeability, 'n' spacing unknown. Linear crosscutting feature separates lower average chargeability values in the NW from higher average values in SE and approximately correlates with a mapped fault. Slightly anomalous values in NW portion appear to correlate with known mineral showings (Quinalta and Polar). SE portion has 2 or 3 N-S trending anomaly features which correlate well with geologic map and could represent continuation of the favourable horizons containing the Polar and Quinalta showings, offset by faulting

GT75-R6 Copper King/Carlisle

13 poorly documented E-W field profile plots, one 'n' spacing only, 400 ft lines by 100 ft stations. Generally uniform, low chargeability readings averaging 6-10 ms, one area of slight contrast on Line 68N at Station 37E with a peak value of 20 ms, local contrast of 14 ms. Area approximately correlates with the Copper King mineral showing.

7.0 Conclusions and Recommendations

Data analysis provides ample evidence for a correlation between mineral potential and geophysical bahavior at several scales. While all polygons demonstrate geophysical characteristics of potential exploration interest, those scoring greater than 10 are particularly considered to merit subsequent investigation. Geology, Magnetics and IP Chargeability are the three factors considered to be most indicative of mineral potential. Of the 7 polygons scoring greater than 10, two rated favourably in all of these categories while four others scored well in two of the three.

A recommended approach to further exploration could consist of :

1. Selection of a limited geographic area based on all the best available indicators of potential.
2. Develop an exploration model for exhaustive analysis of this area with an intent to apply the refined model to subsequent areas.
3. Consider limited geophysical testing to evaluate modern tools and technologies. The use of more current techniques including time-domain electromagnetics should be considered.
4. Identify areas of highest potential land-use conflict in conjunction with local City planners. Establish a time frame for the thorough mineral-potential evaluation of these areas.
5. Examine the possibility of forming a partnership venture between Industry, Government and Municipality. Shared costs for exploration to complete assessment of high priority areas may improve the economic incentives to industry.

It must be kept in mind that the mineral resources of a given area may be permanently lost to discovery and economic development once land is opened to other types of use. Definitive assessment of mineral potential and release of barren areas for other uses should proceed in advance of urban growth.

8.0 Acknowledgments

E3 TerraPhysics appreciates the opportunity to assist in this project and would like to acknowledge the contributions and input of Amerok Geosciences Ltd., Danièle Héon of Yukon Economic Development - Mineral Resources Branch and the other members of the Fall 1997 Mineral Assessment Panel.

E3 TerraPhysics, Nanaimo, B.C.

PROFESSIONAL
PROVINCE OF
J. W. F. MITCHELL
BRITISH COLUMBIA
GEOSCIENTIST

J.W.F. Mitchell, BSc., P.Geo., P.Geoph.

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9.0 Appendix

9.1 **Table 2.** - Copper Belt Deposits - Magnetic Responses Summary

Deposit	Mag. Peak	Average	Comments (O/B=overburden)
Cowley Park	2000	500	0
Black Cub S.	10000	8000	0
Black Cub N.	5000	3000	0
Kodiak Cub	9000	2000	0
Gem	10000	2000	patchy ore
Keweenaw	0	0	weak gradient
Wolf Creek Basalt Plug	3000		
Valerie Shaft	3000	1000	near dump
Valerie N. Zone	2000	1000	0
Little Chief	9000	3000	survey incomplete
Middle Chief	20000	5000	exposed at surface
Big Chief	15000	3500	exposed at surface
Arctic Chief E.	23000	10000	0
Arctic Chief W.	30000	6000	minor O/B
Best Chance	27000	7000	massive magnetite
Pueblo	0	0	no anomaly near pit
Copper King	0	0	
War Eagle	-200	-200	rel. low near mag. diorite
Diorite (Magnetic)	1000	0-1000	
Basalt (Miles Canyon)	4000	0-4000	
Limestone	0	0	uniform low readings
Quartzite etc.	500	0-500	weakly variable

*source - Tenney, 1980
The Whitehorse Copper Belt: Mining, Exploration and Geology (1967-1980)

9.2 **Table 3.** Copper Belt Deposits - Induced Polarization (Chargeability) Responses Summary

Deposit	Anomaly Contrast	Chargeability Peak	Average	Background	Survey
Cowley Park	very good	11	8	2-3	Seigel 1964
Cowley Park	very good	13.4	7	2-3	Cdn.Aero 1968
Black Cub S.	not determined	11		2-3	Seigel 1964
Black Cub S.	not determined	26	20	5-8	Cdn.Aero 1968
Black Cub N.	fair	24	18	5-8	Cdn.Aero 1968
Kodiak Cub	good	20		5	
Gem	good	10	6	2-3	Seigel 1964
Gem	good	8	6	1-2	Cdn.Aero 1968
Keweenaw	poor	6		2-3	Seigel 1964
Valerie	good	7		2-3	Seigel 1964
Valerie N. Zone	good	12	7	2-3	Seigel 1964
Little Chief	very good	20	10	2-3	Seigel 1964
Best Chance	very good	12	7	2-3	Seigel 1964
Pueblo	weak	4		0.1-0.2	Cdn.Aero 1968
Copper King	fair	8	6	2-3	Seigel 1964
War Eagle	fair	22	13	2-3	Seigel 1964
War Eagle	fair	18	12	0-3	Cdn.Aero 1968
Diorite				2-3	Cdn.Aero 1968
Diorite				2-3	Seigel 1964
Limestone		23	13	2-3	Seigel 1964

*source - Tenney, 1980
The Whitehorse Copper Belt: Mining, Exploration and Geology (1967-1980)

9.3 Table 4. Detailed Polygon Characteristics

Polygon Name	Poly. Length (m)	Poly. Width (m)	Poly. Area (ha)	Geologic Setting 1 to 3	Mineral Occur. 0 or 1	~1:1 AEM anomalies #	>1:1 AEM anomalies #	>3:1 AEM anomalies #	Anomaly Density #/(LxW/62)	Magnetic Coincid. # of	Poly Coincid. 0 to 1	AEM Trends 0 to 1	Cultural noise 0 to -1	Resolution noise 0 to -1	IP Charg. 0 to 2	Weighted Score Glgx2,Dnsx0.5
AEM1E-1	1750	2125	372	1	0	11	6	1	3.0	0	0	1	0	-0.5	0	4.0
AEM1E-2	1050	800	84	3	3	3	2	0	3.7	0	0	1	0	0	0	11.9
AEM1E-3	1250	1625	203	3	2	9	5	0	4.3	2	1	0	-0.5	0	1	13.7
AEM1E-4	1250	1175	147	1	0	10	9	3	9.4	1	1	1	-2	0	0	7.7
AEM1E-5	1575	875	138	1	0	9	8	2	8.6	0	1	1	-1	0	0	7.3
AEM1E-6	1375	1250	172	1	0	13	9	6	10.2	1	0	0	-2	-0.5	0	5.6
AEM1E-7	2625	1500	394	1	0	16	11	1	4.4	2	1	1	0	0	0	8.2
AEM1E-8	2250	1500	338	0	0	15	6	0	3.9	1	0	1	0	-1	0	2.9
AEM1E-9	875	800	70	3	0	5	1	0	5.4	3	0	1	0	-0.5	0	12.2
AEM1E-10	1125	650	73	3	2	3	0	0	2.6	0	1	0	0	0	2	12.3
AEM1E-11	1000	500	50	0	0	2	2	0	5.0	0	0	0	0	0	0	2.5
AEM1E-12	1000	500	50	0	0	2	1	0	3.8	0	0	0	0	0	0	1.9
AEM1E-13	2050	675	138	2	0	8	4	0	5.4	0	0	1	0	-0.5	0	7.2
AEM1E-14	1450	875	127	0	0	7	3	0	4.9	2	1	1	-2	0	0	4.5
AEM1E-15	1125	250	28	0	0	2	1	0	6.7	0	0	0	-1	0	0	2.3
AEM1E-16	875	375	33	0	0	3	0	0	5.7	0	0	0	0	0	0	2.9
AEM1E-17	1050	450	47	0	0	3	0	0	4.0	0	0	1	0	0	0	3.0
AEM1E-18	1925	500	96	0	0	2	0	0	1.3	1	0	0	-1	0	0	0.6
AEM1E-19	1225	625	77	1	0	5	3	0	6.5	0	0	1	0	0	0	6.3
AEM1E-20	1000	500	50	1	1	2	2	0	5.0	0	0	0	0	0	0	5.5
AEM2E-1	2625	1700	446	1	0	18	14	10	5.9	0	1	1	-1	-0.5	1	6.4
AEM2E-2	2700	550	149	2	0	10	4	0	5.9	3	1	1	-2	0	2	11.9
AEM2E-3	1050	750	79	2	0	6	4	0	7.9	0	0	1	0	0	0	9.0
AEM2E-4	2500	850	213	3	3	14	0	0	4.1	0	1	1	0	0	2	15.1
AEM2E-5	2300	1475	339	3	3	16	10	0	4.8	0	0	1	-1	0	1	12.4
AEM2E-6	1000	500	50	3	1	2	0	0	2.5	0	0.5	0	0	0	0	8.8
AEM2E-7	3000	1625	488	2	2	13	8	2	2.9	0	0	1	-2	0	0	6.5
AEM2E-8	1150	650	75	1	0	5	5	4	11.7	0	0	0.5	-3	0	0	5.4

Table 4 Detailed Polygon Characteristics

10.0 Attachments

10.1 Plate 1. Airborne Anomaly Polygons

PLATE 1 E

AREA 81-V

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

WHITEHORSE AREA, Y. T.

AIRBORNE GEOPHYSICAL SURVEY

E.M. 30 - MARK III

G - 803 - MAGNETOMETER

SCALE : 1 : 25,000

1/2 0 Miles 1/2

500 0 500 1000 Metres

COMPILED and DRAWN by
WILLIAM JAMAL and ASSOCIATES LTD.
1982

LEGEND

FLIGHT LINE, NUMBER AND DIRECTION ____ >104

CONTROL POINT ____ *54

MEAN FLIGHT LINE SPACING ____ 200 METERS

MEAN FLIGHT ALTITUDE ____ 350 FEET

	IN #	OUT #	
1st CATEGORY - EXCELLENT CONDUCTIVITY	4 : 1	>	●
2nd CATEGORY - VERY GOOD CONDUCTIVITY	3 : 1	>	◕
3rd CATEGORY - GOOD CONDUCTIVITY	1 : 1	>	◑
4th CATEGORY - MODERATE CONDUCTIVITY	1 : 1	<>	◔
5th CATEGORY - DOUBTFUL CONDUCTIVITY	0.5 : 1	<	○

QUESTIONABLE ANOMALY

RESOLUTION ____ R

CULTURAL ____ C

NOISE ____ N

LONG, BROAD CURVE BUT 1 : 1 RATIO OR BETTER ____ L

WEAK, BUT 1:1 RATIO OR BETTER ____ W

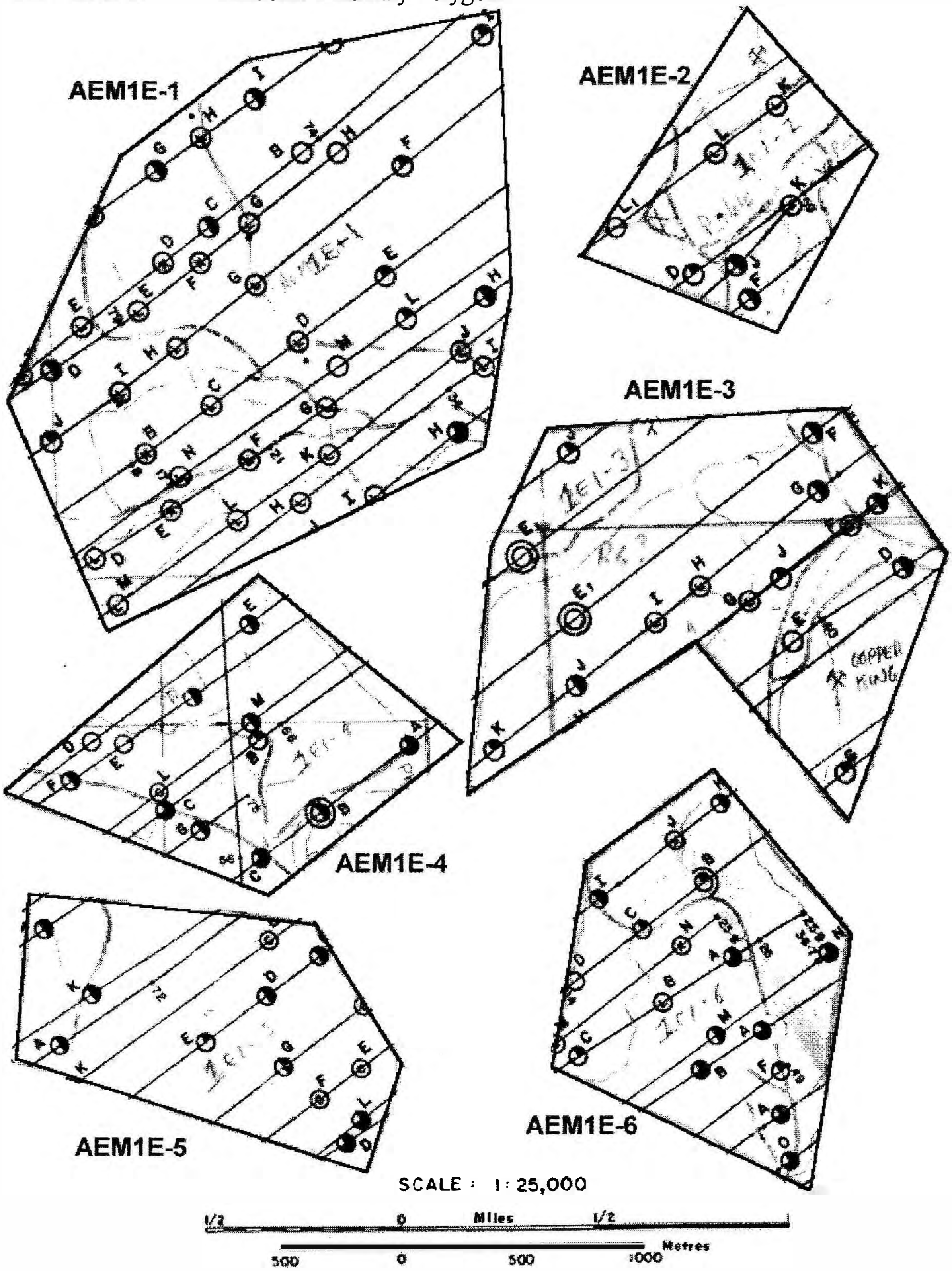
ANOMALY WITH MAGNETIC COINCIDENCE (DIRECT) ____

ANOMALY WITH MAGNETIC COINCIDENCE (BEFORE) ____

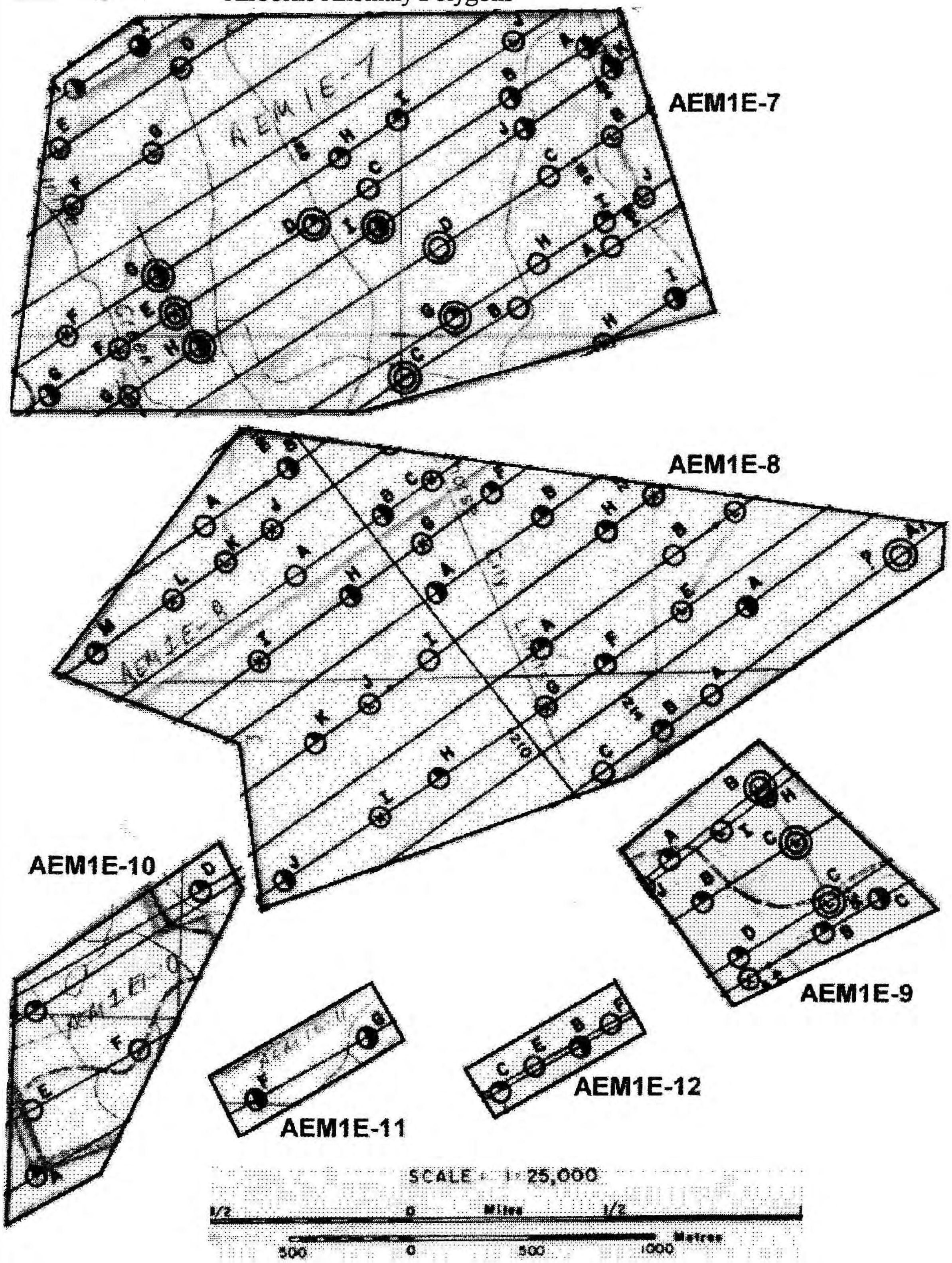
ANOMALY WITH MAGNETIC COINCIDENCE (AFTER) ____

IDENTIFICATION LETTER ____ A,B,C

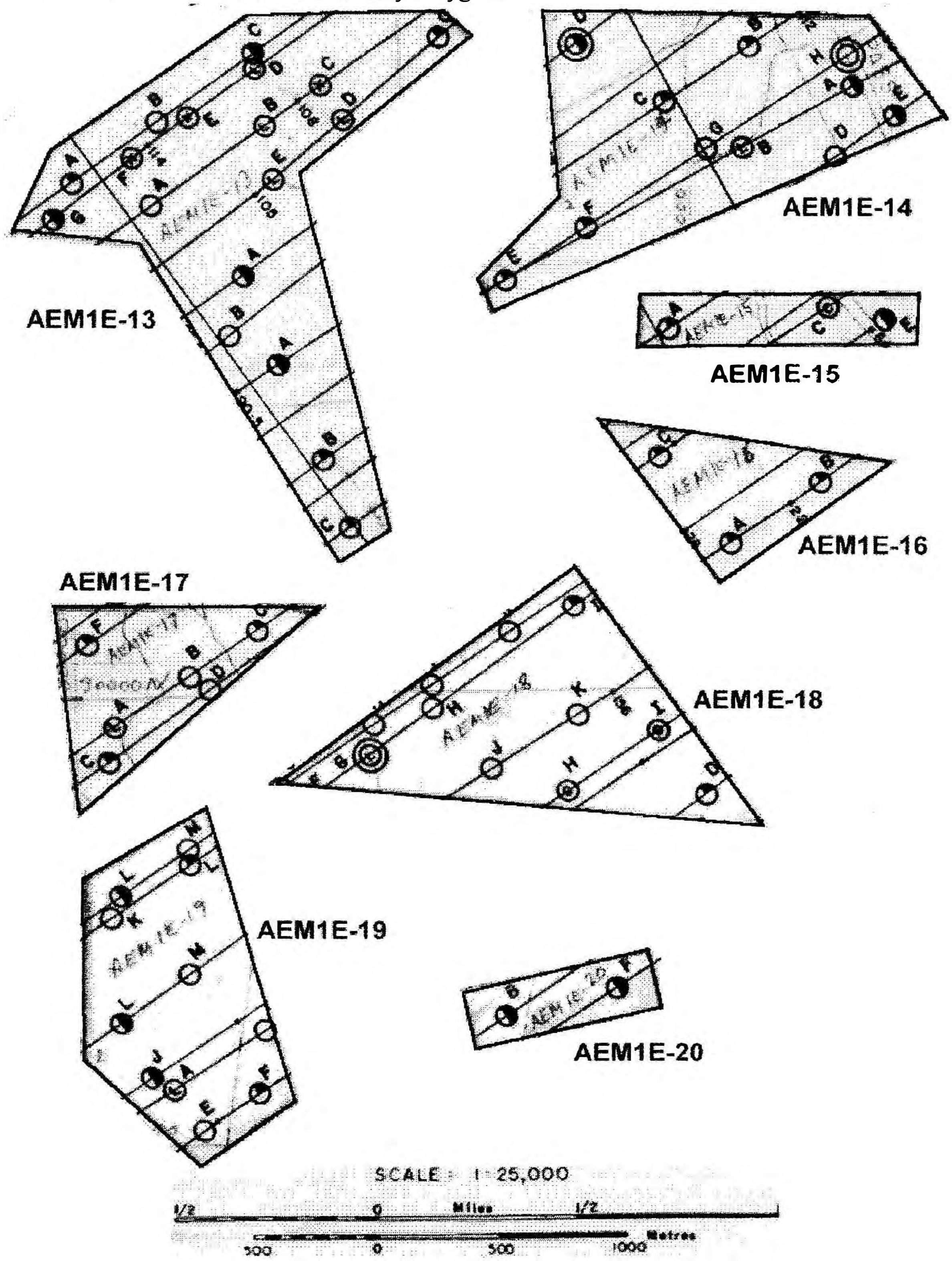
10.2 Plate 2. Airborne Anomaly Polygons



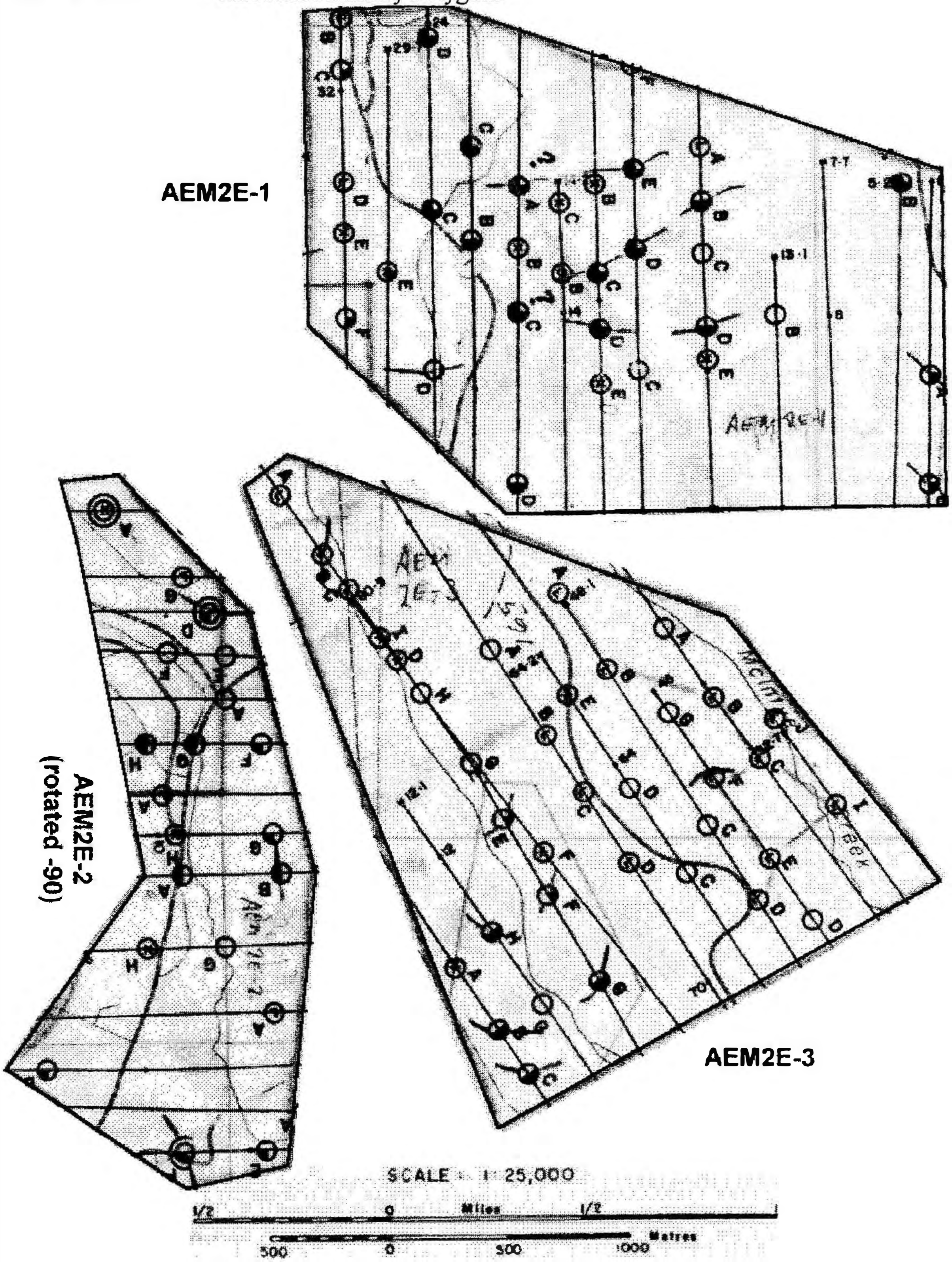
10.3 Plate 3. Airborne Anomaly Polygons



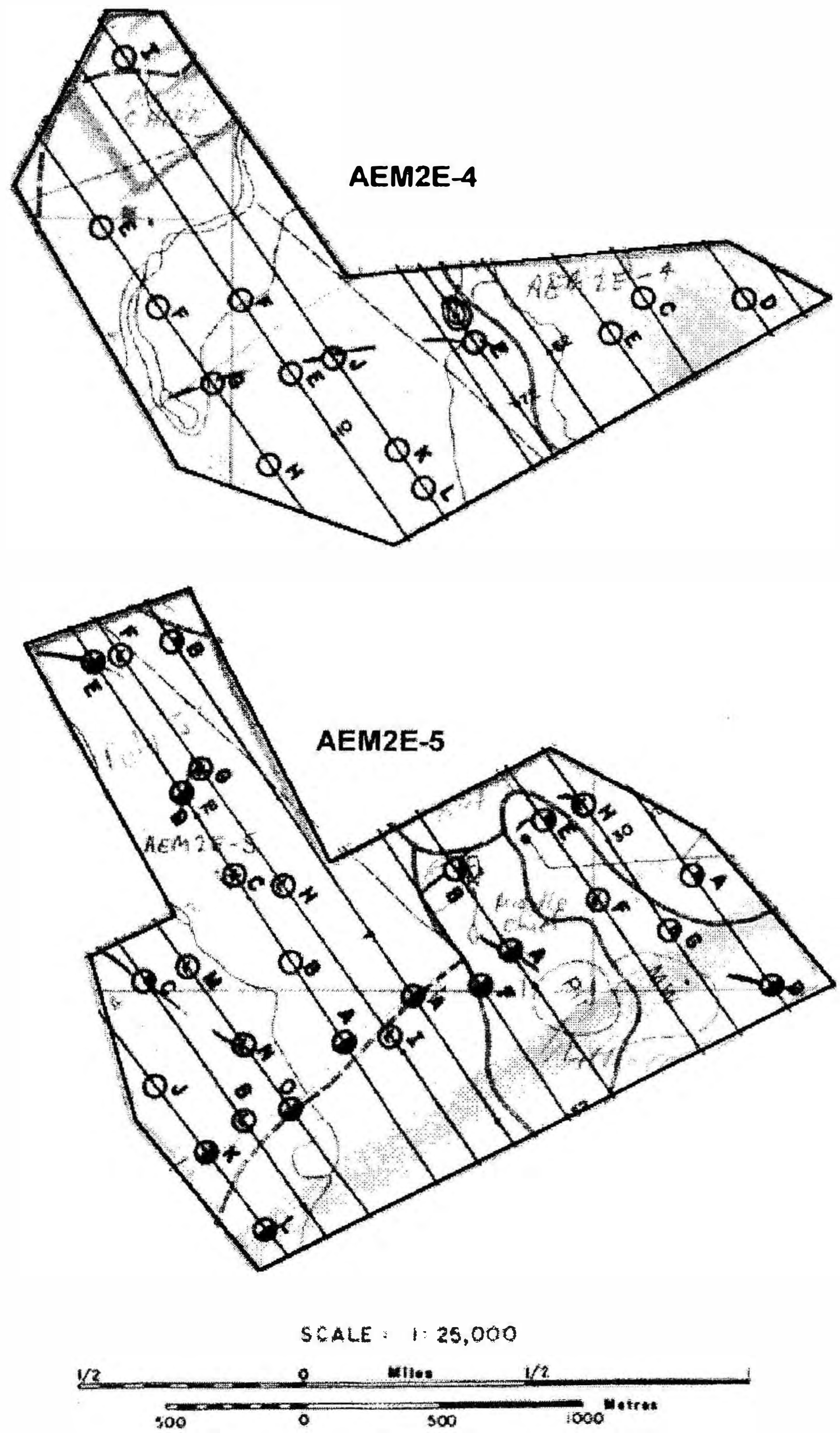
10.4 Plate 4. Airborne Anomaly Polygons



10.5 Plate 5. Airborne Anomaly Polygons



10.6 Plate 6. Airborne Anomaly Polygons



10.7 Plate 7. Airborne Anomaly Polygons