MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities
Northern Region, Right of Way

TO:

Leo J. Woster

Engineer I

ROW Engineering Section

DATE:

July 21, 1992

FILE NO.:

TELEPHONE NO.:

474-2402

FROM:

John A. Miller

Chief Right of Way Agent

SUBJECT:

Rural Airport Survey Policies

In your memo of March 13, 1992 you criticized DOT policies for surveying, monumenting and entering into the public records land status changes effected in conjunction with our rural airport projects. I asked John Bennett, ROW Engineering Supervisor, in coordination with Lee Saylor, Location Survey Supervisor, to review our current practices and prepare a comprehensive discussion of the situation as well as address to your criticisms. His efforts are documented in the attached memo to me dated June 22, 1992.

In my opinion his explanations are clear and comprehensive and his conclusions and recommendations are well reasoned. It is my judgement that our current policies and practices are entirely appropriate.

Thank you for expressing your concerns.

cc:

Steve Sisk, Director D&C John Bennett, ROW Lee Saylor, Location

MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities

John A. Miller Chief Right of Way Agent Northern Region DATE: 6/22/92

FILE NO:

TELEPHONE NO:

474-2413

SUBJECT:

Surveying and Mapping -

Rural Airport Boundaries

FROM:

John Bennett ROW Engineering Supervisor Northern Region

I. Background:

In 1989 it was recognized that the survey, monumentation, and mapping of rural airports was either non-existent or insufficient to meet the needs of Northern Region Maintenance and Operations, Airport Leasing, and Right of Way. Without marked and platted boundaries M&O was having difficulty in identifying encroachments and preventing trespass situations. Airport Leasing required that lessees survey and monument their lease lots yet could not provide survey control upon which to base the location of the lease lots. The Right of Way section, which operates as a public information source with respect to highway and airport right of way plans typically could only provide the "paper plat" property plans which generally depict little in the way of survey control.

This situation was typical of most rural airports but not all. In the late 1960's and early 1970's several boundary surveys were performed for the Division of Aviation by consultants on airports throughout the Northern Region including Cordova, Fairbanks International, Barrow, Kotzebue, and Gambell. From appearances, these were quality surveys performed and sealed by professional land surveyors, with adequate monumentation and well prepared plats. However, the plats were never filed for record and they remained in ADA or DOT&PF office files only to benefit those who knew of their existence.

Several airports were surveyed and monumented by Div. of Aviation staff surveyors, however, in most cases, plats which would depict the dimensions and monumentation along the boundaries were not prepared.

II. Plat Recordation Alternatives:

Once it had been decided to survey and monument the rural airport boundaries, the remaining question was to determine what method was appropriate to enter the evidence of the survey into the public record. The majority of the rural airports are in the Unorganized Borough.

1. Plat of Subdivision

At the time we initiated the surveys and up to now there exists no platting authority in the

Unorganized Borough that has authority for the review and approval of subdivision plats. According to AS 40.15.075 "...The division of lands is the platting authority in the area outside organized boroughs... for only the purposes of hearing and acting on petitions for the change or vacation of plats..." That is, a plat of subdivision may be prepared along with a certificate of ownership and dedication in the unorganized borough and may subsequently be filed at the recorder's office without DNR approval as DNR's authority is restricted to the replatting (re-delineation or elimination) of previously subdivided boundaries or the vacation of previously dedicated public rights of way. Should an owner decide to subdivide a tract of land in the unorganized borough, the survey, monumentation and filing of a subdivision plat at the recorder's office is at the property owners option. Until an subdivision platting authority is created in the unorganized borough, according to AS 40.15.010 "..lands may be sold without (platting) approval." That is, land can be subdivided by a written property description and conveyed by deed without any requirement to survey or plat. According to the AS 40.15.190 definition of a subdivision, we have effectively "subdivided" the properties we have obtained for airport purposes by virtue of the acquisition document which conveyed the property to DOT&PF. Therefore, a subdivision plat which depicts parcels that DOT&PF is not intending to reconvey and does not act to divide a tract or parcel of land into two or more lots is an inappropriate vehicle to depict the limits and monumentation for existing airport boundaries. It is also not in the department's best interest to consolidate the airport lands into one parcel by replat. A variety of interests are acquired for airport lands including many with reversionary rights. Therefore, it is necessary to maintain the original acquisition lines.

2. Boundary Survey:

The Boundary Survey is one of the many plat classifications created by the Recorder's Office. Other classifications include Subdivisions, ASLS, U.S. Surveys, Alaska State Cadastral Surveys, Municipal Selections, Section Surveys, and Alaska Highway Projects. The Boundary Survey classification was established in order to provide a method of recordation of surveys for properties that were not being created by subdivision but existed by virtue of a metes and bounds or other type property description. Once again, there was no requirement for a plat to be filed once a survey was performed and monumented. The plat was filed at the option of the owner and the surveyor.

3. Alaska State Land Survey (ASLS):

A 3/6/92 letter from the DNR Statewide Platting supervisor, George Bernard recommended that airport boundary surveys be performed as an ASLS. The authority to survey public lands managed by DNR prior to the issuance of a long-term lease or a patent is derived from AS 38.04.045. It is generally used for original section surveys, open to entry and remote parcel surveys, and subdivision surveys of DNR lands. The survey process is managed by DNR and is performed under DNR instructions. Although there are certain legitimate reasons to perform some DOT&PF surveys as ASLS surveys, generally it is not in DOT&PF's best interest to use them for all boundary surveys due to the following reasons:

a. Aside from the obvious problems in involving an agency which in the past has

been generally unsympathetic to the schedules and requirements of DOT&PF right of way acquisitions, there are other more critical problems. Since the purpose of an ASLS is to prepare land owned in fee by the State for conveyance to another party, there are requirements for providing public access easements along the perimeter of the boundary and along bodies of water. These easements would be in conflict with the department's security responsibility to control access through airports.

- b. Many properties which constitute an airport are not owned by the State in fee. Examples include perpetual leases, sub-surface restrictive covenants and easements, BLM 20 year leases, FAA, GSA, and COE leases, and a variety of properties which include a reversionary provision in the conveyance document. It is questionable whether we can treat these properties as if they were owned in fee by the State and suggest that an ASLS can validly impose easements on these properties which conflict with the terms of the acquisition documents.
- c. George Bernard's letter also suggested that the ASLS survey would be appropriate for defining the lease lots within the airport boundaries. This issue was discussed with Lorena Hegdal, Chief of Northern Region Airport Leasing. She stated that in order to maintain flexibility in managing airport property, they need to avoid any subdivision or platting of lease lots which would require review and approval of a platting authority. Also, there is no mechanism to transfer the cost of surveying and platting to the lessee. The lease rates are currently fixed by the commissioner and the lessee is required to provide a survey and monumentation of the lots they lease. Due to the varied interests that DOT&PF has in the properties acquired for an airport, it is necessary to preserve the original lines of acquisition by avoiding replats which will vacate or relocate the original property lines. It is also noted that the proposed Senate Bill 81 which will establish DNR as the platting authority for the unorganized borough specifically does not apply to maps prepared for the purpose of transferring a leasehold interest.
- d. During the week of 4/1/92, my Central region counterpart, Jim Sharp and I met with George Bernard and other DNR surveyors to discuss his letter. As stated in their letter, their primary concern was that Records of Survey were not noted on State Status plats and could only be located by researching the plat indices at the Recorders office. I stated that although true, it was a relatively trivial point as anyone searching for surveys in the unorganized borough would have to review the recorder's office records for subdivision plats, BLM 14(c) plats, DOT&PF highway right of way plats and virtually all plats not managed by DNR.

Scenarios in which an ASLS survey performed by DOT&PF is appropriate include the long term lease for the Peger Road complex and disposals of airport lands which by statute must be conveyed to DNR prior to conveyance to a private party.

4. Record of Survey:

The Record of Survey Statute was enacted in 1985 as AS 34.65.030. This classification effectively replaced the Boundary Survey classification. The statute requires that a plat be filed after a survey if one of the three following conditions exists: a) It discloses evidence not appearing on a plat of record previously filed at the recorder or at BLM. b) It discloses a material discrepancy with a plat of record previously filed at the recorder or BLM. c) It provides evidence that by reasonable analysis might result in alternate positions of boundaries from those of record. If the Record of Survey is filed in an area governed by a platting authority, it must contain the note, "this survey does not constitute a subdivision as defined by AS 40.15.190(2)."

As our intent in this exercise was to file a plat in the public record which depicts the monumentation established for the boundaries of previously acquired lands, the Record of Survey was selected as the most reasonable choice.

5. U.S. Survey

Airport parcels received by patent from the Federal government must be surveyed as a U.S. Survey by or under instructions from BLM Cadastral Survey. The surveys must be performed and accepted prior to issuance of patent. Although BLM will eventually survey these parcels to be patented, a survey may not be scheduled for many years due to their backlogged survey program. The alternative is to perform the survey under BLM instructions using DOT&PF staff or consultants at our own cost. An example of a U.S. Survey performed for patent by DOT&PF staff is the Boundary Air Navigation Site which was subsequently incorporated along with other parcels into a Record of Survey.

6. ANCSA 14(c)4 Surveys

Large portions of many of our airports are based upon the 14(c)4 reconveyances from the village corporations. Under ANCSA, BLM is obligated to survey these boundaries. Once again, due to the backlog of BLM surveys, it could be several decades before all of the airport 14c(4) surveys are completed by BLM. As with the U.S. Surveys, DOT&PF has the option of surveying the airport boundaries with staff or consultant at our own cost. Deering airport is an example of a 14(c)4 survey performed by BLM which monumented and platted the complete airport boundary. Wales airport is an example where BLM accepted Division of Aviation monumentation that was not of record as an acceptable definition of the 14c(4) boundary. Bettles airport is an example of a Record of Survey performed by DOT&PF whose boundaries were accepted as valid by BLM for the adjoining 14(c) surveys.

III. Records of Survey Status:

Since initiating this program, over a dozen airport boundaries have been monumented and filed as Records of Survey. All surveys to date have been performed by DOT&PF Locations surveyors with the exception of Dahl Creek. The Dahl Creek survey is a good example of

why a program was needed to get the surveys into the public record. Stutzmann Engineers, as a part of their construction surveying contract, was required to monument the boundaries of the airport and submit a plat. The plat was submitted to Nome DOT&PF and placed in their files. Once we learned of its existence, it was discovered that with minor modifications, the plat would be eligible for filing as a Record of Survey. With review and approval by Stutzmann, the plat was modified and filed for record.

The Bettles airport ROS was an interesting case study in that the project files over more than 30 years had identified a need to survey the boundary, however each time a project neared construction phase, the allocated survey funds were siphoned off for construction purposes. This lack of survey resulted in a major conflict between the location of the airport boundaries as determined by a private surveyor who was contracted to monument the lots for airport lessees and the boundary eventually established by the DOT&PF locations surveyor. By the time that each of the surveys was performed, there existed little evidence as to the true location of the boundaries. The difference between the consultant and DOT&PF was 40' in one direction and 25' in the other. By all appearances, this survey was going to result in litigation as the lessees attempted to recover from the survey consultant. The situation was defused when airport leasing redefined the lease lots to conform the location of the lessees improvements and provided lease credits to offset reduced lease areas. In 1990, BLM performed 14(c) surveys which adjoined the Bettles airport and accepted the Bettles ROS prepared by DOT&PF as the definition of the Bettles airport boundary. This situation drove home the need to monument the airport boundaries and to file a plat in the public record for the purposes of providing control for lessees and making clear the boundaries to adjoiners.

After the first dozen Records of Survey were prepared, it was decided that it would be more efficient to have the Locations survey staff also prepare the plats. At this time the Locations staff has completed 2 ROS plats and has several more in progress.

Projects currently funded for ROW acquisition by FAA are to have ROS plats prepared using federal funds. As several other airports required surveys and did not have federal projects available in the near future, M&O secured an appropriation of \$250,000 in 1992 to survey and map airport boundaries in the Interior District of the Northern Region. Several airports that already had partial surveys by DOT&PF staff would be completed by the Locations surveyors. Surveys for Manley, Livengood Camp, Tanana, and Galena were put out to a consultant. (Manley Land Surveyors) The surveys under this funding will be performed in 1992 and 1993.

IV. Controversy:

On March 13, 1992 Leo Woster, a DOT&PF staff ROW Engineer presented a memo to John A. Miller, Chief ROW Agent stating his objections to the process in which the rural airports are surveyed and mapped. His primary concerns were as follows:

a. That the boundaries as monumented by the DOT&PF Locations surveyor were incorrect due to the fact that the monuments are established with reference to the

construction centerline control as opposed to the design centerline from which the acquisitions are described.

- b. That one ROS in particular violated the Alaska Statutes by purporting to dedicate a public right of way.
- 1. The issue raised in item one is not new nor is it unique to airport boundary surveys. Conflicts commonly arise when construction centerline control is laid out often years after the original design surveys. Although it is intended for these lines to be one and the same, variations in control occur due to differing equipment and procedures, precision of measurements, interpretation of property description controlling elements and the fact that the preliminary and final surveys are rarely performed by the same organization. In most cases, the final design line will vary by several revisions from the location line staked in the field and is not field verified by the department prior to construction. This will require the contractor to lay out the new design line from the locations line and make adjustments as necessary. Anyone who has as-built a highway curve realizes that the observed delta angle will rarely match the record and result in a change to all of the curve data. It is generally the intent that the right of way lines (boundaries) be established by station and offset relative to the centerline except where following an existing record or natural boundary is more appropriate.

I have worked for a dozen land surveying companies in Alaska and can attest to the fact that the methods and procedures each surveyor uses in locating boundaries varies to some degree. However, with respect to location of rights of way, the philosophies range from one end of the spectrum to the other. In my opinion, several of the methods I observed were clearly in error, several were based in logic and appeared to be reasonable and the rest fell in between. My point is not to pass judgement, but to note that there are many interpretations with regard to the location of rights of way.

The airport boundary surveys in question were performed under the responsible charge of the DOT&PF Locations surveyor Lee Saylor. In this capacity, Lee retraces the existing boundaries, interprets the documents, monuments the new property lines and seals the Record of Survey plat. Although Leo Woster's memo was not specifically directed to Lee Saylor, Lee submitted the following response to be made a part of this memo:

"In reference to the memo of March 13, 1992 from Leo Woster. I disagree with most points on Mr. Woster's memo. I take the record of survey as a whole, mostly it is based on design centerline in the field, when we find our original centerline control or references intact, we indeed do just as Mr. Woster has stated. I feel that this is the intent of the property transfer, & I survey & mark the boundaries as such. In the cases where the centerline was not referenced or was in doubt, we used existing survey boundaries as control & tried to duplicate the intent of the property plan & deeds. I consider these cases as the more doubtful surveys. If Mr. Woster has problems with particular surveys & has a different interpretation he should consult with us, & we'll discuss the differences."

Leo Woster states that "In my experience, problems brought into play by improper surveys go on and on; expenses mount, and eventually the whole mess winds up in litigation." Some times that is the case. Each time a surveyor retraces an existing, monumented boundary, he will find differences between the record positions and the monumented positions due to previously mentioned factors. The surveyor must then make a judgement call as to how much of a deviation is acceptable before the monumented positions must be rejected. A surveyor must also consider whether the monumented positions have been commonly accepted and used as a basis for adjoining surveys.

In the rural villages, where there are few private surveys, the DOT&PF airport boundary survey is likely to represent a major influence on adjoining boundaries second only to BLM surveys. The BLM surveys are considered original surveys and generally the monumented position of a corner holds over a conflict with the plat dimensions. The DOT&PF surveys are not considered original surveys and the monumented positions technically would not hold over the record calls unless the monumented positions were fixed by operation of law such as adverse possession, acquiescence, or possibly by a subsequent boundary agreement. However, when subsequent surveyors retrace and accept the boundaries of non-original surveys such as DOT&PF airport boundaries, as a practical matter they become fixed over time. BLM is continuously surveying lands to be conveyed to the villages or reconveyed from the villages under the 14(c) program which adjoin and include some DOT&PF airport boundaries. BLM has informed me that they are generally accepting our surveys as defining the 14(c)4 boundaries according to the following scenarios. In situations where BLM recovers DOT&PF boundary monuments that are not of record, BLM generally accepts their positions as defining the airport boundary if they are in reasonable agreement with the airport property plan. ANCSA 14(c) surveys are executed within a closure limit of 1:2560. If the BLM survey disagrees with the existing survey monumentation beyond those limits, BLM can elect to establish a correction line. In situations where the airport is unmonumented, BLM will utilize the airport property plan as the basis of monumentation and only refer to the acquisition documents if there is an obvious dimensional error on the property plan. In a situation where BLM retraced the Bettles airport boundary which was monumented and filed as a record of survey and in substantial conflict with a private surveyors determination of the boundary, BLM accepted the record of survey boundaries.

In monumenting any survey, there is always the opportunity that a corner will be placed grossly in error due to misinterpretation of the documents or a field measurement error. Often a surveyor is put on notice of an error by a subsequent surveyor retracing a boundary. In those cases, the surveyor must either own up to his error and resolve the problem or reevaluate the reasoning that led to the corner placement and verify that it is justified. Any surveyor who is actively in practice may have to deal with this situation several times in their careers. In our effort to put the public on notice as to the location of airport boundaries, limiting the continuing trespass and encroachment problems, and providing control for the lease lots we will surely have our share of these problems. However, the benefits of monumenting and recording the airport boundaries, in my opinion, outweighs the inherent risks.

In Leo Woster's closing paragraph, he recommends that the process (monumentation and

record of survey) be suspended until a more appropriate method can be found. As he has not suggested any alternatives for evaluation, my response must take the form of the preceding broad brush analysis of our options. In conclusion, I believe that the Records of Survey process, although not perfect, is generally the most appropriate method to place the survey into the record and is of far greater benefit to DOT&PF and the public than performing no survey at all. Under the proposed Senate Bill 81 which will give DNR full platting authority in the Unorganized Borough, a right of way acquisition plat may be recorded before approval and recording of the right of way acquisition plat. Although this will provide a standardized platting authority review process, the effect will be the same as a Record of Survey, that is, a plat will be prepared based upon and referencing the acquisition documents which in fact created the subdivision.

2. Item 2 as noted in Leo Woster's memo relates to a dedication of right of way on the Circle City Record of Survey for an access road through the airport boundary to an adjoining property.

During the negotiations for the acquisition of Tract III of Circle airport, DOT&PF agreed to provide a 60 foot wide non-exclusive easement across the airport property to provide access to adjoining lands from the Steese highway. Generally, access road easements or rights of way within airport boundaries are not dedicated or fixed but are defined as depicted on the airport leasing Land Occupancy Drawings. In this manner, airport leasing is afforded the management flexibility to redefine lease lot and access road dimensions according to their needs. However, in this situation, the agreed upon access easement was necessarily fixed by dedication in order to restrict airport leasing from eliminating or modifying the location and size of the easement. Circle airport was subsequently surveyed and monumented and filed as Record of Survey 89-61RS on 6/7/89. Within this ROS was a Certificate of Dedication signed by the DOT&PF Regional Director dedicating all easements and rights of way as noted to the public.

Leo Woster's comment regarding this dedication was that he did "not believe there is any provision in the Alaska statutes for this, as platting is the required vehicle for such dedications. This appears to subvert the statutory platting requirements."

A rebuttal to this comment requires a discussion of Dedication and the differentiation between Statutory Dedication and Common Law Dedication.

Dedication: The appropriation of land, or an easement, by the owner, for the use of the public, and accepted for such use by or on behalf of the public. Such dedication may be express where the appropriation is formally declared, or by implication arising by operation of law from the owner's conduct and the facts and circumstances of the case.

Common-Law Dedication: A common-law dedication is one made as above described, and may be either express or implied. An express common-law dedication is one where the intent is expressly manifested, such as by ordinary deeds, recorded plats not executed pursuant to statute or defectively certified so as not to constitute a statutory dedication.

Statutory Dedication: A statutory dedication is one made under and in conformity with the provisions of a statute regulating the subject, and is of course necessarily express.

In essence, a dedication is a two part operation. It requires an offer by the land owner to dedicate, and it also requires the acceptance by the public. Statutory dedication formalizes this process.

A statutory dedication is provided under A.S. 40.15.010 <u>Approval</u>, filing, and recording of <u>subdivisions</u>. This statute reads as follows: "Before the lots or tracts of any subdivision or dedication may be sold or offered for sale, the subdivision or dedication shall be submitted for approval to the authority having jurisdiction, as prescribed in this chapter." "The recorder may not accept a subdivision or dedication for filing and recording unless it shows this approval. If no platting authority exists as provided in AS 40.15.070 and 40.15.075, land may be sold without approval." AS 40.15.070 and AS 40.15.075 cite that the Department of Natural Resources is the platting authority outside of the organized boroughs for the change or vacation of existing plats.

Although DNR is cited as the platting authority in the unorganized borough, its authority is limited by statute to the review of replats which modify land boundaries as depicted on existing plats or the vacation of street dedications which have been previously created. They do not have the authority to review and approve subdivision plats therefore cannot accept dedications on behalf of the public. A 1/11/83 AGO opinion on the "Eagle River Urban relinquishment" and a 7/10/89 AGO opinion on "Dedicated easements in Rocky Lake subdivision" have discussed this type of a scenario and stated that where there is no platting authority to approve or disapprove the plat, common law principles apply in determining whether lands were dedicated to public use.

The fact that DNR does not have complete platting authority in the unorganized borough is not lost on DNR or the private surveying community. Currently, subdivisions and dedications may be made in the unorganized borough by deed or plat, are not required to be surveyed and monumented, and require no approval prior to recording. At this time, only DEC has authority to review and approve a subdivision plat with regard to waste water adequacy. Complete platting authority in the unorganized borough may be extended to DNR in the near future by virtue of proposed legislation. Senate Bill 81, entitled "An Act establishing the Department of Natural Resources as the platting authority in certain areas of the state; relating to subdivisions and dedications; and providing for an effective date" was offered in 1991 but has not passed the legislature to date.

Circle airport is in the unorganized borough and is therefore not subject to a platting authority. As such, there are no "statutory platting standards" to subvert and dedications can only be created through the common-law process. No plat, be it subdivision or record of survey was required to create this dedication. Often a common-law dedication is based upon an offer to dedicate an easement to the public by virtue of an express reservation in a property conveyance document or in an easement deed specifically prepared to dedicate an easement. It is also possible to make the offer of dedication with a deed and an attached plat as an exhibit.

In the case of Circle airport, a deed could have been prepared to make the common-law offer, but the Record of Survey plat made a convenient vehicle which combined the offer to dedicate with a graphic exhibit defining the location and dimensions of the offer. The acceptance of a common-law dedication made by a private party is generally determined by the facts of public use and maintenance. Some references suggest that no acceptance is required by a public authority offering a common-law dedication. They state that the public authority that makes the dedication by the same act, in effect, accepts on the part of the public.

Therefore, in my opinion, the dedication of an easement on a Record of Survey was not only legally valid, but also the most appropriate course of action.

cc: Lee Saylor

MEMORANDUM

State of Alaska Department of Transportation & Public Facilities

^{o:} John A. Miller Chief Right of Way Agent

Northern Region

DATE: March 13, 1992

FILE NO:

SUBJECT:

TELEPHONE NO:

474-2458

FROM:

Leo J. Wostek Engineer Northern Region

On August 30, 1989 your predecessor as Chief Right of Way Agent, Northern Region, Mr. Richard L. Odsather, by memo (copy attached) to John D. Horn proposed the surveying of several rural airport boundaries. That memo listed four objectives of the surveys, all valid in my opinion, and from all I have been able to ascertain said memo is the basis of a subsequent series of airport boundary surveys.

I have had occasion to review several of the airport boundary surveys performed since the memo was written, and it appears the surveys as being currently conducted sorely miss the four objectives listed in the above described memo. A brief description of the process as being currently prescribed is as follows:

- 1. Locations survey crew, as a part of the design surveys on an airport, establish a runway centerline. They also tie in existing corner monumentation. This data is used to develop an Airport Layout Plan, which in turn is used to help determine required lands to acquire. A property plan is prepared, and the lands are acquired. The legal descriptions of the acquired lands are written in "metes and bounds" format, as described from the corner monumentation found and tied during the location survey. Deeds are prepared conveying land to the State of Alaska, using these legal descriptions to describe the lands.
- 2. Construction season arrives, and the contractor builds the designed airport improvements. After the work is done, the airport boundary survey commences.
- 3. At this point, the system unravels, as near as I can tell, as the result of a combination of two factors:
 - a. It appears that the as-built centerline, in many cases diverges from the design centerline as developed during the locations/design phase of the project.
 - b. A review of the field notes of several boundary surveys reveals many of the monuments set during the airport boundary surveys are not being established by retracing the record documents; (i.e. the recorded deeds with the "metes and bounds" legal descriptions) but rather by radial

staking to co-ordinates and/or station-offset locations, as calculated using the runway centerline and boundary information indicated on the property plan.

The not unexpected result of calculating the position of a boundary point from the design centerline indicated on the property plan, but setting an instrument on and backsighting a different centerline in the field when physically locating the points, is a monument in a position other than that described in the record document (deed).

Reviewing the the four objectives in the August 30, 1989 memo, it is obvious that the last three objectives are dependent on the first; specifically "a definite location of airport boundaries, monumented on the ground, ...". In my experience, problems brought into play by improper surveys go on and on; expenses mount, and eventually the whole mess winds up in litigation.

In addition to the above problems, it appears the temptation to abuse the record of survey process is too great. In at least one instance (Circle Airport) an attempt was made to dedicate right of way and easements on the filed record of survey. I do not believe there is any provision in the Alaska statutes for this, as platting is the required vehicle for such dedications. This appears to be an attempt to subvert the statutory platting requirements. Similar subversions are probably limited only by the imagination of DOT staff.

Based on these factors, I believe many such records of survey being filed are suspect, and the objectives outlined in the August 30, 1989 memo are not being attained despite a considerable expenditure of effort and resources. If the goal is truly to meet these objectives, I feel obliged to recommend the process be suspended until a way is found to do so. If the only concern is to spend money because the Fed's are generous, the present course will suffice.

LJW/cdt

Enclosure: As stated