

PREFACE

The following pages present a record of the building of the Rank Xerox factory at Mitcheldean.

Naturally I am proud that Giles & Sons have been able successfully to complete this project, but I must acknowledge my debt, in the first place to Mr F. Wickstead, without whose initiative, foresight and determination the Rank Organisation would never have been brought into the Forest of Dean at all; and secondly may I pay tribute to Mr Preece and his staff, and Mr Nicholls and his staff, for their tremendous support throughout the entire project. A pleasant feature of the whole operation, too, was the happy and helpful relationship established with my sub-contractors.

Finally I wish to pay a very special tribute to my co-directors, Mr Cyril Giles and Mr Frank Jones, to the supervisory foremen and, perhaps most important of all, to every single one of my staff.

B. W. MARFELL.

my general foreman,
Mr Arthur Barnard, to

CONTENTS

INTRODUCTION	..	..	..	..	3
THE EARLY YEARS	..	..	..	..	4
THE RANK ORGANISATION	..	..			5
PROJECT 2	..	..	..	..	7
PROJECTS 3 AND 4	..	..	..		9
PROJECTS 8 AND 9	..	..	..		13
PROJECTS 15, 17, 19 AND 20	..	..			15
PROJECT 18	..	..	..	..	23

INTRODUCTION

The years after the 1939-45 war were eventful years for the Forest of Dean, with coal mining on the decline and an urgent need to attract new industry and develop existing industries. During these post-war years much of the economy and prosperity of the Forest, and the Cinderford area in particular, hinged on the fortunes of one factory, that of the Rank Organisation, at Mitcheldean.

This story tells of the impact made by Ranks on the small Cinderford firm of W. F. Giles & Sons, and how the owner, Mr Basil Marfell, transformed his traditional small building firm, employing six men, into a highly efficient organisation capable of competing on equal terms with some of the biggest and best-known construction firms in the country. As can be seen in the following pages the process of change was not an easy one, and the problems as Ranks exploded into growth were often daunting, but as can also clearly be seen the dynamism of Mr Marfell and his qualities of leadership were in themselves guarantees of ultimate success.

This, then, is a success story for the two firms of Ranks and Giles, and for the individuals within, and I am pleased to be able to pay this tribute to them. The whole Forest can be proud of their achievements.

A. J. BRIGHT.

Arnells,
English Bicknor,
Coleford, Glos.

THE EARLY YEARS

W. F. Giles & Sons Ltd., an old established family business, was founded by the late Mr W. F. Giles in the period immediately after the end of the 1914-18 war.

great
In the years between the wars it was engaged with not inconsiderable success in the building, primarily, of houses for owner-occupation. These were difficult times, particularly in the years of depression which followed the economic crisis of 1929, and although many public works contracts were undertaken, the circumstances were hardly conducive to any good expansion. The fact that the firm was able to keep its head above water at all is a tribute to the determination and industry of its founder.

With the opening of hostilities in 1939, the subjection of industry as a whole to the national need and its attendant controls and restrictions meant that the small family business could hope to do little more than tread water until the national emergency was over. During this period the energies of the firm, like those of so many others, were devoted to repairs and alterations and those private works generally which the restricted labour force available and the system of licensing controls would permit.

The end of the war found W. F. Giles & Sons an organisation of master and six men representing a good cross-section of trades and crafts within the industry. As was equally true of all small building businesses, this firm was presented with the challenge of on the one hand the virtually unlimited potential demand for housing reflected by a six years standstill, and on the other hand a seemingly equally unlimited shortage of both labour and materials. A heavily restrictive licensing system was the means used by the government of the day to overcome this problem, a system which created many problems for the industry.

In Cinderford, as in any other town in the country, a few permits for individual houses for owner-occupation were made available, but the greater part of house-building came in the local authority housing projects. W. F. Giles & Sons, in company with other local building firms, began to tender for and receive their fair share of these contracts. At the same time the organisation of the firm had changed. Mr Giles had gone into semi-retirement and his place had been taken by Mr B. Marfell in partnership with Mr L. Giles.

During the later 1940's the building boom began to get under way. Mr Marfell had assumed direct responsibility for Giles & Sons' general building contracts and Mr G. L. Giles for the electrical aspect of the business. As demand accelerated the firm was able to make fairly rapid progress in expansion. Opportunities to win contracts for public buildings as well as for houses were successfully taken and by the beginning of the 1950's a staff of nearly 50 men

had to its credit quite an impressive record of building in general with a reputation for quality, reliability and expedition that resulted in satisfactory relations with architects as well as with clients.

In 1952 the partnership was dissolved. Mr W. F. Giles retired completely and Mr G. Giles took out his shares, leaving Mr B. Marfell on his own. He had by this time, however, gained considerable experience, not only of the administrative, but also of the technical aspect of the business, by working on the sites side by side with the men.

THE RANK ORGANISATION

The Rank Organisation established itself in Mitcheldean in the early part of the war when it took over the old Wintle's Brewery buildings for the production of Bell & Howell cameras and projectors. About ten years later an extension was made for a new case shop.

Then in 1955 a Press and Auto shop was proposed and designed, and Giles & Sons were invited to tender, in open competition with other building firms, by the architects, Gordon Payne and Price. This contract of about £15,000, was well within the compass of the firm although they were at that time heavily committed in the construction of Local Authority housing. Mr Marfell had therefore no reason to think that this contract would be significantly different from any other work in hand.

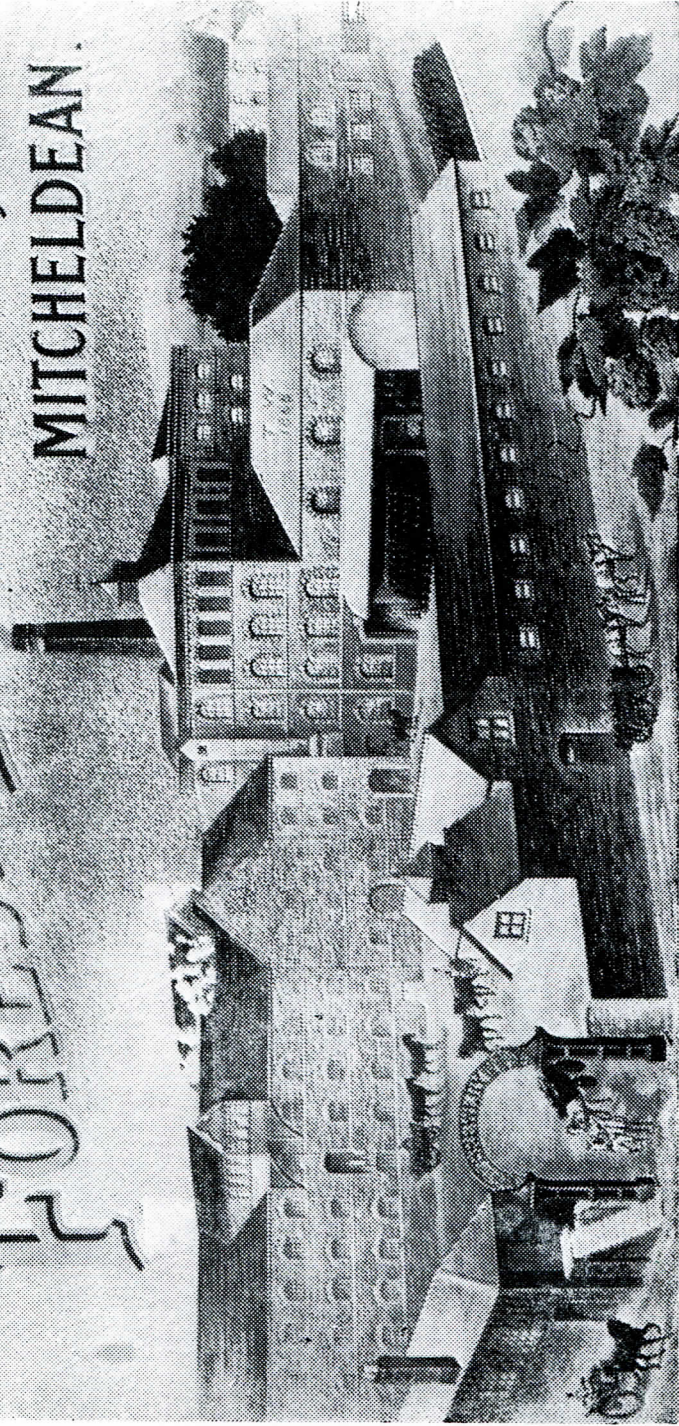
It was different however, as it quickly became evident. Rank's production controller, Mr F. Wickstead, proved to be forceful and intolerant of avoidable delay and from early on a sense of urgency characterised the whole proceedings. Mr Marfell himself was restless and ambitious, his interests lay in the progress of his firm to the exclusion of most other things. He wanted Giles & Sons not only to be competent and reliable but to have a reputation for drive and efficiency. He, too, had introduced an element of urgency and dedication into his business and was only too glad to accept the challenge offered by the Rank Organisation.

So it was that, although they were not aware of it at the time, the acceptance of the first contract for Rank meant the beginning of a ceaseless struggle with limited time, a struggle involving demands on the men's loyalty to which they never ceased to respond.

Time, or rather lack of it, was not the only factor. The nature of the work was often different from any within the previous experience of the firm; and this involved a sense of dedication and a willingness to acquire such experience on the part of all concerned. It was necessary to accept that nothing was impossible given the will to learn.

THE FOREST BREWERY,

MITCHELDEAN.



WINTLE'S BREWERY, MITCHELDEAN

The Press shop and Automatic machine shop were commenced on August 5th, 1955 and completed in December of the same year. It was a relatively small contract, won in open tender, and Giles & Sons had many other, and larger, works in progress at the same time.

The contract had within it, however, certain features hitherto not within the experience of Giles & Sons, still a small firm, both in terms of capital investment and of labour force, for the client required a works programme. Hitherto their contracts had had a time limit of course, but within that time limit they had been absolutely free to organise progress as it had suited them. Furthermore, because of limited capital investment, Giles had to rely heavily on physical manpower. Because of the works programme they found themselves working to a schedule which might have presented less difficulty to a firm blessed with heavy capital equipment, but which strained the resources of a small firm. This became apparent when difficult rock was encountered in the excavations at the rear of the building. The need for co-ordination with sub-contractors made a relatively minor problem of this nature a source of anxiety to Mr Marfell, who naturally was responsible for all the work to be done. He was learning the hard way the full significance of works programming and its attendant difficulties of co-ordination. As a result this period of perhaps a few months became a period of transition from the less rigid approach of the small firm to at least the methods of the larger organisation.

Notwithstanding the difficulties the contract was completed on time and Giles & Sons received the clients' congratulations. More important, they were invited to tender for the next project, no. 2, a new plating shop. Mr Wickstead, now general manager of Ranks, insisted on open tenders in the interests of his company. It was incumbent on him to prove to his Board that the work could be done within the time limit he demanded, whether by local or national builders.

PROJECT No. 2

At the time Giles & Sons were heavily committed with works already in progress including the new T.A. centre at Cinderford, but a realisation of future possibilities made Mr Marfell determined to win this Rank contract. So it was that against local and national rivals Giles & Sons were successful with a price that Mr Marfell knew would leave very little room for manoeuvre.

This proved to be the least of his worries, for it was quickly realised that the construction of this new Plating Shop, commenced on 13th April, 1956, and to be completed in October of the same year would mean a programme which could best be described as desperate. In addition to the difficulties such limited time in itself created, it soon became apparent that the building was

more complicated than was at first thought. A firm whose experience was almost entirely limited to the construction of flats and houses was now presented with the problems involved in a complicated drainage system and plant installation. Included in the contract were air extraction ducts, acid drainage, floors proof against acid, and complicated electrical installations. It was their first experience, too, of difficult and complicated reinforced concrete works, beam and column casing, in situ concrete staircases and suspended floors.

As though the prospect of the problems that might arise out of this were not sufficiently daunting, there came the unlooked for difficulties of access and confined working space. Heavy steel frames had to be brought through narrow streets and in spite of the restricted space a heavy crane had to be used on the site. Over all this hung the ever present threat of falling behind programme. Mr Wickstead was, very properly, quite relentless in his determination to have the contract completed on time, and Mr Marfell was equally determined to prove to Ranks that Giles & Sons could do it. As difficulties mounted the very dedication and sincerity of both led to a certain degree of tension which mutual respect did little to diminish. And difficulties there were above the normal, some totally unforeseeable.

The work began with the demolition of old wartime reinforced-concrete air raid shelters. For this, the firm relied largely upon the manual strength of some of the older Forest workers. The work was hard, but they were a match for it. Movement was greatly hampered by the close proximity of the existing boundary walls which had to be propped, particularly where stanchion bases were excavated. Thirty 6' x 6' bases were required. As the workmen dug deeper and deeper it became obvious that a firm bottom was not to be found. Unknown to the architects the old buildings had been erected on ash deposit beds from the furnaces of eighteenth and nineteenth century iron workings near Mitcheldean. An interesting side-effect of this discovery was that the firm's ex-miners found a use for their skill and experience; it is possible that without them such a setback would have presented a very serious problem.

The weather was good, but as the excavations got deeper the danger from a break in the weather became more and more serious. Because of the ever-present threat of flooding and a consequent collapse of the walls of the trench it was decided to work at full pressure during daylight hours and to continue after dark by floodlight. Mr Marfell asked for the co-operation of his men and because of his direct personal leadership and since they knew he asked no more of them than of himself, their joint effort resulted in success. It was decided with the consultants to widen the holes at the base and to fill the space with concrete, all mixed in mixers and loaded by hand from South Cerney gravel, the mixture man-handled into the holes. Mr Marfell's example, the experience and tenacity of the ex-miners and good weather conditions all combined to enable the work to be completed by the Easter Saturday.

As a relief from the tension of the past weeks Mr Marfell and all the men went to the local for a grand celebration — and down came the rain! In fact it rained heavily all that week end, but too late to do any damage whatsoever to the concreting.

With the foundations completed came the arrival of the crane and deliveries of the steel. The off-loading proceeded according to plan, and, under such pressure as they were, everyone was relieved to see the erection of the steel frames. The intensity of the programme necessitated the hiring of the complete scaffolding and items of equipment never before used. This was indeed a testing time for a firm which had had little previous experience of steel, for the relentless pressure allowed no mistakes, and put out of count any idea that knowledge of this medium, which for them was quite new, could be acquired in any leisurely fashion. Giles & Sons were moving out of the world of bricks and mortar into the sphere of structural engineering! This led to a general re-appraisal of their equipment. If any great proportion of the work of the future were to be programmed in this way then the equipment already in the possession of the firm would be totally inadequate.

These were indeed worrying times for Mr Marfell. Some of the delays were unavoidable, many of the difficulties were unforeseen, and it had to be accepted that the firm's equipment was as inadequate as the firm itself was inexperienced. However he was determined not to be beaten and to persevere until all obstacles were surmounted. A parallel determination was shown by Mr Wickstead; for him, too, there could be no relenting, no modification, and the programme stayed.

Mr Marfell's stubborn refusal to accept defeat was backed by a tremendous effort on the part of his men, control of the work was maintained and the contract was completed on time.

When the final reckoning was made the financial reward proved to be very mediocre, but a wealth of experience had been gained, and with it a lot of pride and self-confidence. A very intense and involved contract had been completed in an exceptionally short period of time. It had been worth it.

PROJECTS 3 & 4

Project 3 of the Rank Scheme was concerned with an office block.

It involved bulk excavations, reinforced concrete frames and a steel framework. For this reason, although it did not entail a large contract, the architects and Mr Wickstead were of the opinion that a local building firm would not have the necessary experience; that the complexity of the concrete work would require the technical knowledge and equipment available only to a larger construction company. Once again there was an intense programme and the

national company was fully extended to complete the contract on time, even to the extent of approaching local builders for labour.

The very much larger Stage 2 of Project 3 was put to open tender as Mr Wickstead was anxious to make the utmost possible use of local firms. The contract was won by a Cinderford firm, W. G. Powell, and Giles & Sons remained on the site only to carry out work on the new gate-house and various other small contracts.

Project 4 was to be undertaken in two phases, and the clients decided to invite open tenders for Phase 1, which would, in effect, be the preparation of the site for the constructional work to follow. Such preparation would involve levelling and bulk excavation.

It is not difficult to see that it was very much in the interest of Giles & Sons to remain on the site by winning this first contract at almost any cost. Mr Marfell, in his determination to pursue this policy, had the foresight to persuade his potential sub-contractors to support him by submitting very keen tenders. As a result the contract bid was successful. This was to pay dividends far in excess of what had been imagined, a source of great satisfaction to all concerned.

At this stage Mr Marfell was very much aware of the nature of the challenge, but his confidence had greatly increased. His staff were giving him every support, his firm was becoming much more highly mechanised, and he and they, through the experience of the past, had acquired a new competence. Seen through the eyes of a smaller firm the work was sophisticated, but he knew they could do it. There was no problem of programming and tight schedules that could not be overcome by enterprise, enthusiasm and drive accompanied by a willingness to learn.

Work on Project 4, Phase 1 was commenced on 7th January, 1961. The contract for Phase II, the actual construction work, was negotiated with the architect and client. The building in Phase II followed straight on from the preparation of Phase I, and the whole was completed on 17th June, 1961, the total contract being in the medium price range for Giles & Sons. There were no complications in either Phase. Full use of the mechanised excavators, now a part of the firm's equipment, was made, as was indeed the modern building technique acquired in earlier work.

During the next twelve months Rank Mitcheldean underwent a period of consolidation. Giles & Sons were on the site for much of that period, involved in several minor projects and alterations to existing buildings, and so it naturally followed that the contract for Project 4A was negotiated.

Project 4A was an extension of Project 4. There were no complications and no difficulties and the contract, started on 1st July, 1962, was completed on the last day of December.

Although nothing untoward happened in the actual work connected with Project 4A, Mr Marfell committed himself to a still greater extent to a policy

of heavy bias towards large scale contracting by the purchase of a considerable quantity of heavy equipment. This included excavators, dumpers, compressors and other plant and tools. The face of the firm had changed.

However there occurred a much more significant development during this period. Before the construction of Project 4A was completed a decisive increase in the demand for Xerox machines necessitated the projection of a lot more factory building. Giles & Sons were on the site and immediately negotiations were opened for the contract for Project 8.

His
At this point the decisive increase in demand for the machines became what might be termed as Xerox explosion and here the key factor was the foresight and drive of Mr Wickstead—to anticipate this demand explosion required no mean faith in the Xerox machines. This policy was to bring a major industry into Dean Forest to replace the declining coal industry. This necessarily involved not only the purchase of land, but the persuasion of the local council, particularly the planning departments, that his projects were right. With a unique single-mindedness, and tremendous drive he brooked no obstacle, and bit by bit plans were passed, not only for the factory space, but for the housing which would be needed to accommodate the skilled staff it would be necessary to import from outside the Forest of Dean. Once construction was under way Mr Wickstead kept all site meetings subject to one over-riding purpose, to keep on target with the programme at all costs. If some of those involved found the strain very considerable, at least the seemingly impossible was achieved, and no matter what adverse circumstances were met, each project was completed on time, and the plant was operating, sometimes even before the scheduled time.

Mr Wickstead's wisdom in employing a local contractor now began to bear fruit, for the difficulties initially intensified by lack of experience, were more than compensated for by the ability of the contractor to accommodate the client in all problems and modifications at a local and immediate level. The inflexibility which would have characterised negotiations with a national contractor was thus avoided. The result was very satisfactory indeed.

There had been a risk in this policy, for the local contractor did have his limitations in experience, technique and equipment. It was by no means certain that he would be a match for the problems involved. However, from the beginning, Mr Marfell had been anxious to accept the challenge presented him, and a combination of determination and a willingness to learn and gain experience as he went along enabled him to carry his staff with him.

An interesting off-shoot at this juncture was concerned with the introduction into Gloucester of a Ready-Mix Concrete firm. Mr Marfell decided to use this opportunity and, before long, because of the vast orders needed for the Mitcheldean site, a branch was set up at Drybrook based almost entirely on the demands of Giles & Sons for Rank Xerox.



THE RANK ORGANISATION
RANK MITCHELDEAN PLANT

MITCHELDEAN, GLOUCESTERSHIRE · TELEPHONE: DRYBROOK 421 CABLES: RANK XEROX GLOS.

OUR REF: FW/DC.
YOUR REF:

24th December, 1963.

Mr. B.W. Marfell,
Messrs. W.F. Giles & Sons,
Dockham Road,
Cinderford,
Glos.

Dear Mr. Marfell,

It gives me very great pleasure to write to wish you and your colleagues a very happy Christmas and continued prosperity in 1964. May I tell you how much the Company appreciates the tremendous effort that has been put into project's 8 and 9 during the past twelve months, without your leadership and determination we should not have been as far advanced as what we are.

Personal regards.

Yours sincerely,

F. Wickstead.

RANK PRECISION INDUSTRIES LIMITED

DIRECTORS: JOHN DAVIS, *Chairman* J. P. COLLIS H. LEEMING J. A. STAFFORD F. WICKSTEAD, J.P. KENNETH WINCKLES, M.B.E.

PROJECTS 8 & 9

Within a few weeks of the completion of Project 4A work was continued on Project 8, once again a negotiated contract. In actual fact work was commenced on this project some two weeks before the signing of the contract. The need for urgency on the part of Rank was matched by the co-operation of Giles & Sons. No officialdom or red tape was allowed to impede progress. The early start paid handsome dividends for it was towards the end of 1962.

During the Christmas holiday the thermometer sunk to levels not often experienced in England, and this extreme cold continued, largely without a break, for six weeks. In many places it was the coldest winter for 200 years, and, even in Mitcheldean, by February it was commonplace to read of 20 and even 30 degrees of frost.

At Ranks such progress had already been made with the concrete foundations before the beginning of the extreme temperatures that, despite the appalling weather conditions, the fierce frosts came too late to retard the programme more than marginally. The severe cold did not affect the steelwork and sheeting. As week after week of the terrible winter went by all parties concerned could only bless the circumstances that had permitted an early start, for no foundations could have been laid in the kind of frost prevalent during February and early March. The whole operation would have, of necessity, been stilled.

Project 8 was completed on 25th July, 1963, not one day late, notwithstanding the severe weather, but whilst it was in progress Project 9 was brought into the programme. A new model machine, No. 914, had appeared and it was imperative that it should be launched on the market without delay. Rank Xerox came to Giles & Sons and asked them to negotiate a price for constructing factory space that it just had to have at once. At the same time work had to be commenced on a new boiler house for Projects 4, 4A, 8 and 9. So it was that three projects were actually running concurrently during the summer of 1963.

light
All the projects had been programmed with little margin for delay, but Giles & Sons had become inured to and experienced in such light schedules. The programming of Project 9 was none-the-less especially severe. Furthermore there was in it some very complicated work, such as the construction of a Dortmund tank, of which Giles & Sons had had no previous experience. In consequence maximum effort was required of everybody, and even then the firm was fully extended.

The situation was not made any easier by the presence on the site of a drainage and roadworks contractor who was well behind schedule. In consequence Mr Marfell, determined not to be defeated by time, had to drive himself and his staff increasingly to keep to the programme. The significant factors here were obviously full co-operation from the men and as near to

THE CHAIRMAN'S OFFICE



38 SOUTH STREET LONDON W. 1

MAYfair 7454

JD/FJC

10th March, 1964.

B.W. Marfell, Esq.,
Managing Director,
W. F. Giles & Sons Ltd.,
Dockham Road,
Cinderford,
Gloucestershire.

Dear Mr. Marfell,

I refer to the work which you have been doing on behalf of this Organisation at Mitcheldean, known as "Project 9".

I am advised that this work has now been completed, and I would like to take this opportunity for thanking you for the manner in which you have pushed forward with the project, particularly bearing in mind the appalling weather conditions under which you had to work in the early part of 1963.

The building of this extension to our factory is of considerable importance to us, and you may be interested to know that the bulk of the products which will be made in it will be exported.

Once again, many thanks for your assistance,

Yours sincerely,

A handwritten signature in dark ink, appearing to be 'E.J. Preece'.

FW
copy E.J. Preece Esq.

THE RANK ORGANISATION LIMITED

faultless site organisation as it was possible to get. Improved techniques of concreting had been evolved and were now put to good use, and the complicated reinforcing and framework of the Dortmund tank were successfully completed. A key factor in the success of this operation was the tremendous effort put forward by the men in response to the demands made upon them by Mr Marfell who was even more ruthless with himself.

This fact was appreciated by the Rank Organisation, witness a letter dated 24th December, 1963 from the Chief Executive, followed by a letter dated 10th March, 1964 from Mr John Davis, Chairman of the Rank Organisation in London.

Part of Project 9 was taken over by the clients before its completion. This was made physically possible by the erection of temporary partitions, and in principle by the fact that Giles & Sons was a one-man local firm not bound by the regulations and restrictions of a larger company. As a result production of Xerox machines was actually under way before the building was finished, illustrating the personal appreciation of the client's problems on the part of the contractor, and a real vindication of Mr Wickstead's policy in employing a local firm.

By the end of 1963 projects 8, 9 and 11 had been completed, an achievement fully recognised by a very satisfied client. By this time, too, Giles & Sons had become a very different firm. They had acquired a great deal of technical knowledge and, more important, had become experienced in the organisation and execution of large contracts to a very severe programme, notwithstanding the fact that this had been gained under great stress and strain. This confidence in their own administrative ability had been matched by their experience of complicated drainage systems and reinforced concrete techniques which was to hold them in good stead in the future.

PROJECTS 15, 17, 19 & 20

With the completion of Project 9 came the completion, too, of the existing site. This coincided with the realisation on the part of Ranks that the potential of the Xerox copying process had definitely caught on in the business world. No. 813 had been a desk copier and No. 914 a larger model for business offices. The development of Model 2400, the largest projected so far, meant the probability of the need for still further expansion. Mr Wickstead, foreseeing such a possibility, had already set wheels into motion for the negotiation of the purchase of the adjoining farm. It was not easy to obtain planning permission for the

GORDON PAYNE AND PREECE

Architects, Surveyors, Valuers and Town Planning Consultants

GROSVENOR HOUSE, GLOUCESTER.

Telephone Nos.: 24471/2/3/4

GORDON PAYNE, O.B.E., J.P., F.R.I.C.S., M.T.P.I.

E. JOHN PREECE, A.R.I.B.A.

Your Ref.

Our Ref. R/EJP/HJH

11th March 1964

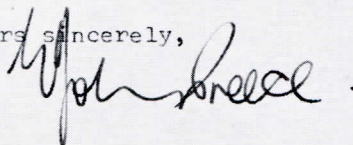
B. W. Marfell Esq.,
Messrs. W. F. Giles & Sons Ltd.,
Dockham Road,
CINDERFORD,
Glos.

Dear Mr. Marfell,

The Rank Organisation
Project 9

I was very pleased to see that Mr. Davis had taken the trouble to write to you (and myself) congratulating you on the work you did on Project 9. I should like to formally associate myself with his remarks and I think the general spirit in which this job started and (more important) finished, is a credit to your organisation.

Yours sincerely,



Office Hours: Monday to Friday 8.45 a.m. to 5.30 p.m.

development of good agricultural land for industrial purposes, but Mr Wickstead's determination eventually met with success, and the plans for the expansion necessary to meet the demands for the new machine became a reality.

The new site presented topographical difficulties; the land was undulating and through it ran a brook. It was decided to culvert the brook before any other work was undertaken, and an underground water storage tank of concrete was constructed with a view to future use as an auxiliary reservoir for fire-fighting purposes. The culverting was carried out with Bronco galvanised sections 6 feet in diameter.

At this point the Client intimated that contracts for Projects 17 and 15 were to be negotiated; they were therefore able to use the few months of waiting as an invaluable opportunity to prepare for the work eventually to be carried out. Making maximum use of the experience gained in previous contracts, and of the advance information they were able to acquire from the clients, full and detailed preparations for the programming of the contract as a whole, and of the reinforced concrete part of the work in particular, were made.

As the areas of reinforced concreting were to be extensive, preparation for this included the making of pre-formed shuttering. The co-operation of architects and consultants in giving advance information was essential, and it was in fact readily forthcoming. Enthusiasm on the part of Giles & Sons for this pre-planning gathered momentum and it was not long before it covered the complete range of all aspects of the contract which would eventually have to be considered.

Using the experience gained in Project 9 as a basis, discussions of the operational and administrative problems that would be likely to materialise took place at regular intervals. Nothing was omitted from these discussions, planning of personnel and leadership, site storage, office accommodation, disposal of materials around the site in relation to the stage of the works at which it would be needed, and of the progress of the work as a whole. Past experience had shown that it was advantageous to appoint a member of the staff for the site specifically to be responsible for setting out, taking and checking levels. Consideration of these problems revealed the need for the purchase of new instruments.

Organising the firm's mechanised potential resulted in the purchase of a new excavator, a new compressor and of other plant.

The office, too, came under review. There the very fact that the staff were so limited in number made it the more essential that every item should be pre-considered and that, for example, materials, schedules, ordering and delivery should be dealt with in order and with precision. Consultative discussions took place between administrative and technical staff on the one hand and quantity surveyors on the other, during which schedules and estimates were considered as well as technical details.



RANK XEROX
LIMITED

MITCHELDEAN PLANT

MITCHELDEAN, GLOUCESTERSHIRE TELEPHONE: DRYBROOK 421 CABLES: RANK XEROX GLOS. TELEX: 43132

YOUR REF.

OUR REF. JGKB/SJA

23rd December, 1965.

B. W. Marfell Esq.,
Managing Director,
W. F. Giles & Son Ltd.,
Dockham Road,
Cinderford,
Gloucestershire.

Dear Mr. Marfell,

I cannot possibly let this festive season pass without writing to you to pass on the Company's most sincere thanks for the excellent job of work that you and your colleagues have done at Mitcheldean during the past twelve months. Not only have you maintained the tight scheduled dates, but in addition, you have helped us very considerably with additional work that could not have been planned in a methodical manner, for which we are extremely grateful.

Personally, may I wish you and yours a very happy Christmas, and may you be blessed with good health and prosperity during the ensuing year.

Yours sincerely,

F. Wickstead, Chief Executive.

DIRECTORS:

Chairman, JOHN DAVIS

Co-Chairman, JOSEPH C. WILSON (U.S.A.)

Managing Director, T. A. LAW Assistant Managing Director, N. G. FOULKES

J. P. COLLIS JOHN H. DESSAUER (U.S.A.) GRAHAM R. DOWSON SOL. M. LINOWITZ (U.S.A.) C. PETER McCOLOUGH (U.S.A.)

Finally, in conjunction with the architects, detailed programming was carried out and, everything already pre-planned, all awaited the actual word Go.

As soon as negotiations had been completed work commenced, and the whole of the carefully planned machine was set into operation. It quickly became obvious that the advantages to be derived from the forward planning were incalculable, and that in this way the small firm could undertake contracts of no mean magnitude with every confidence, notwithstanding the limited number of administrative staff. It was, in fact, a complete vindication of Mr Wickstead's policy.

Progress was so successful that, despite the fact that two large contracts were already under way, it was possible to accept the introduction of a third, Project 20, to run concurrently. This was done without undue anxiety and with complete confidence that it could be finished on time without retarding the progress of the first two. In point of fact all the work was completed to schedule although the extra contract had not been bargained for, and despite the difficulties that arose in the early stages where excavations for Projects 15 and 17 were in rock and fill, and in Project 20 fill only. Because of planning it was not found necessary to sacrifice any of the quality of the work in order to complete the contract on time. At this stage Giles & Sons felt that any doubts that may have lingered in the minds of clients, architects and consultants as to their competence to organise and carry out large contracts had been finally dispelled.

Two of the contracts, Projects 15 and 20, had involved the laying of large areas of concrete, and over the months Mr Marfell had learned how important it had been to keep in balance the four major operations: foundations, steel, roof and floor. When the floor construction was only one or two days behind the roof, the floor was on target, and this made possible the installation of the heating and all ancillaries on time too. Sometimes in Projects 15 and 20 the firm had only the qualified approval of the consultants and architects when the floor construction was pushed ahead of schedule, but because this part of the contract was in front of the target it was possible to take up unavoidable delays in other sections.

At this time Giles & Sons could be excused some self-congratulation that a local firm of limited size had carried to a successful conclusion these quite large contracts and all on time.

After the completion of Projects 15, 17 and 20 in January, 1966 the next few months were spent in clearing up minor works on the site and in readiness for the next development. These minor works included Project 1A, an extension to the Press and Auto Shop, Project 21, a new Vehicle Maintenance Shop, and Projects 4B and 4C, both small extensions for vehicle loading and off-loading.

During the construction of Project 15 and in anticipation of the need for extension, provision had been made by the building of an extensive reinforced



RANK XEROX
LIMITED

MITCHELDEAN PLANT, MITCHELDEAN, GLOS.

TEL: DRYBROOK 421 CABLES: RANKXEROX GLOS TELEX: 43132

29th December, 1966.

B. Marfell, Esq.,
Messrs. W.F. Giles & Sons Ltd.,
Dockham Road,
Cinderford,
Glos.

Dear Mr. Marfell,

Another twelve months have passed and once again on behalf of the Company I write to thank you for the efficient manner in which you have carried out the two major contracts at Mitcheldean, to say nothing of all the help and co-operation that we have received on our numerous small projects and building maintenance.

I am quite confident that Project 19 will be finished on time, and I am sure that both the Architect and your company are to be congratulated, not only on the speed in which the project has been carried through, but based on the results to date I am sure that we are going to be very happy with the design and the quality of workmanship.

Here's wishing you a Very Successful 1967. I hope that you will be fortunate in finding contracts worthy of your ability, and in this direction I write to confirm that I will be only too pleased to provide any potential client and their architects with a reference.

Yours sincerely,

F. Wickstead
F. Wickstead, Chief Executive.

DIRECTORS:

Chairman, JOHN DAVIS

Co-Chairman, JOSEPH C. WILSON (U.S.A.)

Managing Director, T. A. LAW

Assistant Managing Director, N. G. FOULKES

J. P. COLLIS JOHN H. DESSAUER (U.S.A.) GRAHAM R. DOWSON C. R. P. HAMILTON H. LEEMING SOL. M. LINOWITZ (U.S.A.)
C. PETER MCCOLOUGH (U.S.A.) F. J. PALLISCHECK (U.S.A.) J. W. RUTLEDGE (U.S.A.)

RANK XEROX (MANAGEMENT) LIMITED

JOHN DAVIS (Chairman) T. A. LAW N. G. FOULKES G. R. DOWSON

J. H. PICKERING H. E. R. SHAND D. R. SHEPPARD R. WALKER F. WICKSTEAD

concrete retaining wall, yet another example of Mr Wickstead's forward thinking. To make room for the installation of new specialist machines and for new production space, extra room for storage soon became necessary.

The increased skill and accuracy in the setting out of Project 15 by the firm's staff, for which they were highly complimented by the structural steel contractors, was a very important factor, for because of this and of the general condition of the site, Messrs. Boulton and Paul were able to keep to, and ever improve upon, a very close erection programme. In consequence the contract was completed in December, 1966, but, in view of the importance to the client of increased production, Giles & Sons gave full co-operation in allowing partial occupation of the building some months before the actual completion.

While work was in progress on Project 15, in May, 1966 Project 19 was commenced.

In some respects this building was different from all its predecessors in that it was to have two storeys comprising, on the ground floor National Workshops and Testing Laboratories, and on the first floor the Design Department. The National Workshops were to be used for the repair, maintenance and modification of existing Xerox machines and was combined with an Intensive Inspection and Testing Laboratory which included a radio interference room. The Design Department was a spacious and open-type plan. Both floors provided Giles & Sons with work outside their previous experience.

All the now usual organisation and pre-planning went into the project before it was commenced, but this time the firm were very soon in difficulties with the stanchion base and trench excavations. They reached an unexpected seam of solid rock. This was of such a nature that, after discussions with the steel consultants, certain modifications to the plan were made.

Intense efforts were made to keep to schedule in spite of the problems created by the difficult sub-strata. Even the use of explosives was considered, but the consultant very promptly vetoed this suggestion because of the close proximity of a Gabion retaining wall. Ultimately the difficulties were overcome with the use of a new type of rock drill.

The unsuspected seam of rock was not the only difficulty in Project 19. It was to be a two storey building, space was very restricted and the roof and first floor had to be finished before the commencement of the brickwork. This, in turn, created the new problem of protecting the completed floor from the elements until such time as the walls could be erected.

A point of interest for Giles & Sons was the technique, new to them, of laying a suspended floor. There were other new techniques too.

The quality of the work for Project 19 was to be of a higher standard, the buildings and installations were to be more elaborate than those of other projects, there was to be a new type of heating system, the ceilings were to be constructed of new materials as indeed were the partitions and finishes, and the

PREECE | PAYNE PARTNERSHIP

Grosvenor House, Gloucester

**architects surveyors
& quantity surveyors**

telephone 24471 5 lines

your ref

our ref

R/EJP/HJH

E John Preece ARIBA chartered architect
Roger J Payne Dip Arch (Birm)
ARIBA chartered architect
David B Payne Dip Arch (Oxford)
H L MacDowell ARICS chartered (quantity) surveyor
Consultant
Gordon E Payne OBE FRICS MTPI
chartered surveyor and chartered town planner

B. W. Marfell Esq.,
Messrs. W.F.Giles & Sons Ltd.,
Dockham Road,
Cinderford,
Glos.

29th June 1967

Dear Basil Marfell,

Rank Xerox Ltd.

I received a letter from Mr. Wickstead this morning which I was delighted to receive and in it he asks me to write to you thanking you for the efforts made on the Rank extension programme over the last two years. I do not think I can do better than enclose a copy of his letter as it expresses my own views completely. I have the greatest pleasure in saying that I completely endorse Mr. Wickstead's remarks and although they were primarily directed at our own office I consider them equally applicable to your organisation.

Yours sincerely,

John Preece

Person
b.c. Mr. Marfell (Giles.)

9th September, 1968.

MY REF: FW/MMH/JF.

Mr. E.J. Preece,
Preece Payne Partnership,
Grosvenor House,
GLOUCESTER.

Dear Mr. Preece,

Project 18.

I know that you have had innumerable problems due to changes in design, Planning Permission etc., but, in spite of this, the progress to date is distinctly encouraging.

I am anxious that we should now take the next major step forward to ensure continued satisfactory progress. You know my feelings with regard to getting materials on order - both by the main contractor and by the sub-contractors. I therefore feel that the time has arrived when we should be seeing a material schedule. I assume that the items to be listed will probably be best shown in order of priority of requirements, taking into account the lead times involved, and preferably broken down under main contractor and the various sub-contractors.

May I suggest that we have a column after the item showing 'Date of Design Clearance'/'Architects Clearance'. Next column - 'Date of Order Placement' - third column 'Delivery Requirements' and a fourth column for remarks in which the Architects and the contractors will make any comment, particularly against problem items.

In view of the difficulties that have arisen as a result of Design and Planning clearance and our changes in requirements, I consider that it may be necessary in some instances to place orders prior to formal approval of Design clearance etc. This may involve us in some slight excess costs, but I am prepared to face up to these rather than have major hold ups at a later date.

Do you think we could see this document in draft form say, in about two weeks time?

Yours sincerely,


F. Wickstead.

first floor office was to be of an open-type plan. The brickwork, broken up between the columns, needed to be very accurate.

Mr Marfell was determined that this building, part of which was to be for the use of senior technicians, should be of the highest quality without any modification whatsoever of the programmed schedule. Despite the complexity of part of the work a guarantee of completion on time was given without hesitation because of the firm's increased confidence and of the close co-operation of all parties concerned, clients, architects, consultants and contractors.

Project 19 was linked to Project 17 Services block which required some alteration and installation of additional power units.

There was some reorganisation of existing factories and offices which led to an addition to the first floor of Project 15. This addition took the form of an executive suite for the use of visiting directors and of Mr Wickstead himself. The work was of first quality, commensurate with Mr Wickstead's increased responsibilities and position. Further new offices were built for senior executives and one to house a new computer.

In addition Giles & Sons have been continuously employed in an extensive maintenance programme for the whole factory.

PROJECT 18

In the early summer of 1968 Mr Marfell became aware that a further and much larger extension to their existing buildings might be considered by Ranks. It was at this stage little more than a rumour, but as the possibility of such a contract was of tremendous importance to the firm, it was decided to arrange the disposition of all other works so as to be ready for such an eventuality.

At this point there was no clear idea of the scope and nature of the project, but it was suspected that it would be considerably more extensive than any previous single project, sufficiently large in fact to warrant a review by Giles & Sons of their organisation and administration with the object of analysing their ability to meet the demands it was anticipated could be made upon them.

As time went on it became likely that although the project had not been passed by the Board and no Industrial Development Certificate had been issued, if it did materialize it would be a contract in the neighbourhood of £1 million.

A great deal of pre-planning was done now. The site was well-known to the firm and in any case there would have to be a retaining wall. A lot of research was done with regard to excavation and quantities of concrete likely

to be used. Although it was something of a gamble it was decided to investigate in some detail the works capacity of potential sub-contractors and suppliers even to the extent of listing such sub-contractors who could be called upon as a reserve, bearing in mind possible technical problems and the expected limitation of time.

Various possibilities were studied and plans were made for dealing with any likely problems arising out of them. It was thought, for example, that there would be an in situ concrete floor. A detailed study of the technical difficulties which could arise in the laying of this type of floor was made, and the attendant programming was thought out in detail too.

Everything was duplicated and checked, especially the critical elements of the work, excavations, site preparation, availability and delivery of materials, the specialist concrete works, steel fixing in the retaining wall, and technical advice was sought on procedures and processes.

The whole site and structure were pictured and note was made of the specialists who could be called upon in case the work ran into serious difficulty. Quotations even were obtained for the construction of the wall in case Giles & Sons could not do the work themselves, and estimates were obtained for supplying scaffolding and other large items.

The architects obtained from Mr Marfell a schedule of rates and were able to prepare for Rank's Board a price scheme in budget form.

All this anticipatory work on the part of architects, consultants, quantity surveyors and contractor was done in the hope that the contract would eventually materialize; but no I.D.C. had been given.

One of the problems in this connection was that Mitcheldean was not in one of the special development areas where there was a critical unemployment situation. However the local Member of Parliament was fully appreciative of the prosperity that Ranks had brought into the district and gave his full support to the proposals to make the new Xerox 3600 in the Mitcheldean plant rather than in another part of the country.

The I.D.C. was issued ultimately and the Rank Board, having been given a budget price, decided to go ahead with the project.

The release of the I.D.C. saw the beginning of a period of intense activity. The Rank Board wanted the first part of the factory to be operational by mid 1969 because of the critical element in the marketing of the machine abroad, and the second part had to be completed by December of the same year.

Perhaps a twinge of uncertainty or even fear was felt by Mr Marfell when he realized how little time was available. After all it was, for a firm of his size, a large contract.

Everyone realized how vital it was in a contract of this nature for the critical part of the work to be well under way before the approach of bad weather. The architects and consultants had prepared preliminary plans and

information was available which normally would have taken several months to obtain. A key factor here was the mutual trust between the client, architects and consultants, and contractor.

The Land Commission had not cleared the site as not liable for a development change and there was a risk that such a change could be made if work had commenced before the clearance date.

On the other hand, because of the preparation already completed, Giles & Sons were waiting to go, machines and equipment were on the site, and all necessary preliminary drawings were to hand. Mr Wickstead was approached regarding the possibility of an early start, and through his good offices, release was obtained for a proportion of the off-site works, outside the curtilage of the factory. It was, therefore, possible to take full advantage of good weather. Such progress was made under ideal conditions that by the official starting date, August 5th, hedges had been removed, temporary fencing erected and, as far as possible the off-site drainage had been completed. The stream had been culverted and excavations and layerised scalplings carried out to the loading dock area. The quality of the work was of a higher standard because the conditions were right.

This calculated risk paid off for after August 5th the weather deteriorated, and had the preliminary work still had to be undertaken lorries would have been bogged down with the inevitability of delay to the main contract. Furthermore when the excavation of the stanchion bases and retaining wall base took place, after work on the main site had commenced, it was possible to put the excavated material on top of the completed culvert. This could not have been done otherwise because the lorries could not have got up and down the wet bank and excavated material would have had to have been taken off the site, at increased cost.

The key to progress now was the retaining wall. The structural steel work had to rest on the wall and as the date of the arrival of the steel had been fixed it was of paramount importance that the construction of the wall should not be behind schedule.

A great deal of pre-planning had gone into this vital part of the contract, conversations had been had with the consultants and tentative estimates of the quantities of concrete required had been made. It had been anticipated that there would be a high rock content in the excavations and the necessary plant had been organized. In case of difficulty contacts had been made with sub-contractors as an insurance. In the event this help was not required.

The actual building of the wall was of interest in several respects. In the first place the quite complex steel reinforcement proved to be a tremendously successful operation expertly carried out by Giles & Sons' own personnel, not professional steel fixers, work which drew commendation from the consultants. The new technique of shuttering, however, was not such an unqualified success.

PREECE | PAYNE PARTNERSHIP

Grosvenor House, Gloucester
GL1 1SU

+ Northfield House, North Circular, London, N.W.10
telephone 01 965 5588

Private

your ref
our ref R1304/EJP/HJH

B. W. Marfell Esq.,
Messrs. W.F.Giles & Sons Ltd.,
Dockham Road,
Cinderford,
Glos.

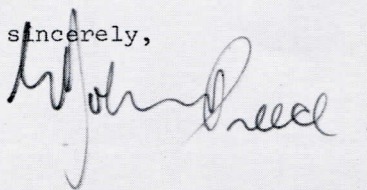
Dear Mr. Marfell,

Rank Xerox Ltd. Project 18

Thank you very much indeed for your letter of January 6th which I very much appreciate. I have made it my business to see that the senior people in the office read this letter.

I hope the happy relationship which at present exists between our two offices may long continue.

Yours sincerely,



**architects surveyors
& quantity surveyors**

telephone 24471 5 lines

E John Preece ARIBA chartered architect
Roger J Payne Dip Arch (Birm) ARIBA chartered architect
David B Payne ARIBA chartered architect
K G Shadwell ARIBA A Inst Arb chartered architect
H L MacDowell ARICS chartered (quantity) surveyor
Consultant
Gordon E Payne OBE FRICS MTPI chartered surveyor and chartered town planner

14th January 1969

The firm thought they could improve on it in the light of the experience gained here. In the actual concrete itself a lot of effort had gone into the organization of deliveries. A great deal of assistance was forthcoming from many parties, in particular the consultants.

The construction of the retaining wall and stanchion bases, the perimeter foundations, the access road and the preparation of the over-site for the receiving of the steel went so much according to schedule that Boulton and Paul were able to start on programme, and, on finishing on programme, were able to express their satisfaction as to the preparedness of the site.

At this stage much time was spent in consultation with the architects and consultants in preparing the works programme for the whole contract. Initial programming was concerned only with the main structure to afford the clients further opportunities to consult with the architects with regard to more detailed planning.

A feature of the restricted time available was that a great deal of work was in progress at the same time. This meant that the disposition and storage of materials on the site required very careful organisation. In this the close co-operation between general contractor, steel contractor and roofing contractor was a source of great satisfaction, and the steel erection, building of perimeter walls and roofing proceeded side by side and on schedule.

Concurrently with this work architects, engineering consultants and general contractors as well as flooring contractors were intimately engaged in extensive discussion of the method, programming and quality of two critical items of the contract, the first and ground floors. Here weather, methods of protection, and access had to be considered with so much material on the site, as well as the actual laying.

The result of the close co-ordination between the general contractors, Stuarts Gravelithic and Concrete Midlands Ltd. was that the two floors, which were built together, won general recognition as of the highest quality.

The second stage now had to be re-programmed. This stage included heating and electrical services, a major item, and external works. Here again Giles & Sons were fortunate to receive excellent support and co-operation from Rank Xerox Ltd., who were responsible for electrical works, compressed air, fire alarms and telephones; and from Woodward & Co., who were responsible for heating and ventilation installations.

Both phases of the Contract were completed on time, notwithstanding a period of wet time calculated as 12 weeks. It had been with some trepidation that Giles & Sons had embarked upon a £1 million contract to be ready for occupation in 17 months, but the success of the operation owed a great deal to the anticipation, forward planning and detailed organisation of supplies and works, in which two vital factors were the procedure adopted by the firm supported and checked by professional engineers, and the preparation of the

over-site plateau. This had been followed by programming, pre-planning and forward thinking, even to details, on the part of all concerned.

Because of the size of the contract and its occupation by the client in phases, Giles & Sons found it necessary at its conclusion to spend some time bringing the overall building up to inspection level and to their own standards.

The firm had concluded its largest contract, of nearly £1 million, and in a little over 17 months of actual working time.

PREECE PAYNE PARTNERSHIP

Grosvenor House, Gloucester
GL1 1SU

+ Northfield House, North Circular, London, N.W.10
telephone 01965 5588

**architects surveyors
& quantity surveyors**

telephone 0452 24471/5

E John Preece ARIBA chartered architect
Roger J Payne Dip Arch (Birm) ARIBA
chartered architect
David B Payne ARIBA chartered architect
K G Shadwell ARIBA A Inst Arb
chartered architect
H L MacDowell ARICS
chartered (quantity) surveyor
Consultant
Gordon E Payne OBE FRICS MTPI
chartered surveyor and chartered town planner

your ref

our ref P/EJP/HJH

B.W.Marfell Esq.,
Messrs. W.F.Giles & Sons Ltd.,
Dockham Road,
Cinderford,
Glos.

30th December 1969

Dear Mr. Marfell,

Rank Xerox - Project 18

I enclose a copy of a letter I received from Mr. Wickstead just before Christmas. The letter is self explanatory and I should like to add my own appreciation of your continuous drive and the interest you have shown on this contract and I am quite sure that it is this approach which has enabled us to achieve the practical completion by the original contract date, although the nature of the work was changed considerably.

My very good wishes for a happy and prosperous 1970 to you and your firm.

Yours sincerely,

John Preece



RANK XEROX
LIMITED

MITCHELDEAN PLANT, MITCHELDEAN, GLOS. GL170DD
TELEPHONE: DRYBROOK 421 CABLES: RANKXEROX GLOS. TELEX: 43132

FW/YH.

22nd December, 1969.

Mr. E.J. Preece,
Preece Payne Partnership,
Grosvenor House,
Gloucester.

Dear Mr. Preece,

Another momentous year draws to a close. Once again our architects and contractors have completed a major project on time. I hate to be repetitive but I can only say thank you John and your colleagues and everyone else for completing approximately £1 M project within 18 months from sketch plans. It is a wonderful achievement and it is greatly appreciated. It would wrong of me and very difficult to single too many people out, however two stand very high in my mind. The first is undoubtedly Mrs. Moye - she has been a tower of strength and has undoubtedly played a very major part in the operations and once again the contractor W.F. Giles - Basil Marfell, the human dynamite.

Kindly convey my best wishes to all those connected with the project and to you personally and your partners, every possible success in 1970 and the years ahead.

Regards,

Yours sincerely,