U.S. Department of Justice
Washington, DC 20530

Supplemental Statement
Pursuant to Section 2 of the Foreign Agents Registration Act of 1938, as amended.

OMB No. 1105-0002

For Six Month Period Ending 27 MAR 1995
(Insert date)

Name of Registrant Ruder Finn, Inc. Registration No. 1481

Business Address of Registrant 301 E. 57th Street
New York, NY 10022

I—REGISTRANT

1. Has there been a change in the information previously furnished in connection with the following:

(a) If an individual:

(1) Residence address	Yes ☐	No ☐
(2) Citizenship	Yes ☐	No ☐
(3) Occupation	Yes ☐	No ☐

(b) If an organization:

(1) Name	Yes ☐	No ☒
(2) Ownership or control	Yes ☐	No ☒
(3) Branch offices	Yes ☐	No ☒

2. Explain fully all changes, if any, indicated in item 1.

IF THE REGISTRANT IS AN INDIVIDUAL, OMIT RESPONSE TO ITEMS 3, 4, and 5.

3. Have any persons ceased acting as partners, officers, directors or similar officials of the registrant during this 6 month reporting period? Yes ☐ No ☒

If yes, furnish the following information:

Name	*Position*	*Date Connection Ended*

Defense Mechanisms in Lung Infection

Mucus and Cilia: The First Line of Lung Defense

The airway epithelium is lined with ciliated cells and a mucus layer, which act as a mucociliary escalator to clear foreign particles such as microorganisms and inhaled particles, keeping the lower airway sterile.

Abnormalities of the mucociliary apparatus may involve the mucus and the cilia themselves, according to Prof. Charles Feldman, University of Witwatersrand and Hillbrow Hospital, Johannesburg, South Africa. Diseases such as COPD and cystic fibrosis cause thickening of mucus, while overtreatment with mucolytics may result in excessive thinning. Bacteria also stimulate mucus production.

Ciliary abnormalities are rarely primary. Secondary abnormalities, which are more common, are associated with advanced age, cigarette smoking, air pollution, and bacterial or viral infections. Impaired ciliary function, in turn, may be a component of chronic bronchitis, allergic disorders, asthma, and respiratory infections.

Bacterial Toxins

Bacteria commonly found in the respiratory tract cause ciliary dysfunction in many ways. In vitro studies show that pneumococcus secretes several protein toxins, including one known as pneumolysin.[1] Studies by Prof. Feldman and his colleagues show that this protein causes a decrease in ciliary beat frequency (CBF) that is related to hemolytic activity, but not necessarily the result of it. In addition to its effect on cilia, pneumolysin also contributes to the inflammatory effect by stimulating white blood cells and activating the complement cascade, leading to epithelial damage.

Another respiratory pathogen, Pseudomonas aeruginosa, also slows cilia; the phenazine pigments pyocyanin and 1-hydroxyphenazine (1-HP) produced by this microorganism play a role.[2] Pyocyanin also disrupts the airway epithelium and enhances oxidative metabolism of neutrophils, contributing to ciliary slowing.[3]

By slowing CBF, the toxins secreted by pneumococcus and Pseudomonas may enhance colonization of the respiratory tract and produce acute or chronic disease.

Reactive Oxidants

Although intracellular depletion of cyclic AMP is involved in the mechanism of ciliary slowing by bacterial toxins, reactive oxidants may also be important. These oxidants are also released by neutrophils following activation.[3]

Prof. Feldman and colleagues studied the effects of reactive oxidants on human ciliary function in vitro and found that hydrogen peroxide and hypochlorous acid cause ciliary dyskinesia and slowing. Hydrogen peroxide produced by pneumococcus is known to cause experimental alveolar epithelial injury, and its production is an important virulence determinant of this microorganism.[4]

Because ciliary beating is highly energy-dependent, one mechanism by which hydrogen peroxide may slow cilia is the depletion of energy that results from DNA strand repair following damage by the hydroxy radical, which is produced by hydrogen peroxide. Prof. Feldman showed that ciliary beat frequency is not reduced when the DNA repair enzyme is inhibited.[5]

In summary, Prof. Feldman observed that bacterial and host inflammatory factors may impair mucociliary function and allow persistent colonization of pathogens, which

perpetuate the inflammatory process and lead to a vicious circle and chronic disorders of the airways.

Bacterial Products and Interaction with Neutrophils

Cilia and mucus, together with phagocytosis by alveolar macrophages, provide a first line of defense in the airways. The inflammatory response is the most important second-line response.

Failure of the inflammatory response and the role played by bacterial toxins in inhibiting neutrophil function were discussed by Prof. Gerhard J. Ras **[PLEASE INDICATE AFFILIATION]**, Pretoria, South Africa. His studies with Pseudomonas aeruginosa have helped to clarify the mechanisms involved in this process.

Colonization of the respiratory tract by Pseudomonas and release of toxins by this microorganism not only lead to direct damage of the ciliated epithelium but also disrupt most other aspects of the lung's defense system (Table 1).[6] When chronic colonization is established, the inflammatory response is also chronic. Under these conditions, neutrophils are activated by proinflammatory signals, including immune complexes, opsonized particles, and leukoattractants (Figure). These activated neutrophils cause tissue damage by releasing oxygen radicals and proteolytic enzymes, including elastase, collagenase, and gelatinase. Clinically, the tissue damage may be manifested as bronchiectasis.

Prof. Ras studied the effects of two Pseudomonas toxins, pyocyanin and 1-HP, on the function of activated neutrophils and found that pyocyanin, but not 1-HP, increases the generation of superoxide as well as the rate and duration of oxygen uptake by activated neutrophils.[7]

An important feature of activated neutrophils is degranulation, with release of myeloperoxidase, an enzyme that normally functions to destroy microorganisms but can also oxidize halogens. Prof. Ras found that 1-HP stimulates myeloperoxidase-mediated iodination of neutrophils, probably as a result of an increased release of the enzyme by the activated neutrophils. In contrast, pyocyanin only slightly enhances myeloperoxidase release.

The effects of three antibiotics--roxithromycin, erythromycin, and clindamycin--on the interaction of bacterial toxins with activated neutrophils were also studied by Prof. Ras and his colleagues.[8] These antibiotics were shown to inhibit superoxide production by both control and pyocyanin-treated neutrophils, and myeloperoxidase activity in control and 1-HP-treated cells.

The results of these studies suggest that pyocyanin and 1-HP are involved in the etiology of bronchiectasis in cystic fibrosis patients with chronic colonization of the airways by Pseudomonas aeruginosa. Further, because these three antibiotics antagonize the proinflammatory effects of bacterial toxins on neutrophils, they may have therapeutic value for patients with bronchiectasis and other infections due to Pseudomonas.

Immunological Mechanisms in Bronchial Infections

Features of the host defenses in persistent bacterial colonization of the airways, which results in bronchiectasis, were reviewed by Dr. R. A. Stockley, The General Hospital, Birmingham, UK. He reiterated that the first line defense is the mucociliary escalator--specifically, bactericidal and bacteriostatic proteins and immunoglobulins, particularly secretory IgA. In addition, complement, proteinase inhibitors, lymphocytes, and phagocytic cells all contribute to the defense.

When the first-line defense becomes overwhelmed by large numbers of bacteria, however, the inflammatory response comes into play, with recruitment of neutrophils and monocytes and the release of cytokines by lung cells, including lymphocytes.

Defects in the host response may be mechanical, such as damage to the mucociliary escalator. They also may involve the immune system, including deficiencies in immunoglobulins or their subclasses, or complement. Cellular features, particularly neutrophil migration or killing-ability defects, and neutropenia may contribute to a decreased host response.

Dr. Stockley observed that mucoid, mucopurulent, and purulent sputum from patients with bronchiectasis often contains large numbers of Hemophilus influenzae, as well as Pseudomonas, particularly in patients who produce purulent sputum.

He found only minor abnormalities in plasma immunoglobulin levels and their subclasses in patients with bronchiectasis, as compared with age-matched controls. In sputum samples, however, the levels of IgA were elevated. Furthermore, these antibodies are effective, since they opsonize bacteria-coated latex beads, as shown by the ability of neutrophils to phagocytize these particles. Locally produced IgG and its subclasses are also present in the sputum of patients with chronic infections; quantities are increased in purulent secretions as compared with mucoid secretions.

Turning to lymphocytes, Dr. Stockley noted that T-cells and B-cells--especially CD8, or suppressor, cells--are known to be present in elevated numbers in the epithelial lamina propria of patients with bronchiectasis. Dr. Stockley found that all classes of lymphocytes are recruited into lung secretions. Mucoid secretions recruit, all lymphocyte classes, while mucopurulent and purulent secretions contain a predominance of CD4, or helper, lymphocytes. This finding suggests that the increased number of

CD8 cells found in epithelial tissue is due to proliferation within the lung, rather than recruitment.

So it is paradoxical that in the presence of persistent infection, normally functioning or even overactive immunoglobulins and lymphocytes are found in the lung. The well-known antigenic variation in bacteria may help to explain this apparent discrepancy. Dr. Stockley looked at outer membrane proteins, including P_1, P_2, and P_6, in Hemophilus influenzae. He found that, indeed, the epitopes of these proteins undergo change over time, and that these changes are reflected in the ability of the bacteria to bind IgG. These results suggest that immunological changes due to antigen drift may play an important role in persistent infection in patients with bronchiectasis.

References

1. Feldman C, Mitchell TJ, Andrew PW, et al. The effect of *Streptococcus pneumoniae* pneumolysin on human respiratory epithelium *in vitro*. Microbial Pathogenesis 1990;9:275-284.

2. Wilson R, Pitt T, Taylor G, et al. Pyocyanin and 1-hydroxyphenazine produced by *Pseudomonas aeruginosa* inhibit the beating of human respiratory cilia *in vitro*. J Clin Invest 1987;79:221-229.

3. Jackowski JT, Szepfalusi ZS, Wanner DA, et al. Effects of *P. aeruginosa*-derived bacterial products on tracheal ciliary function: role of O_2 radicals. Am J Physiol 1991;260:61-67.

4. Duane PG, Rubins JB, Weisel HR, et al. Identification of hydrogen peroxide as a *Streptococcus pneumoniae* toxin for rat alveolar epithelial cells. Infect Immun 1993;61:4392-4397.

5. Feldman C, Anderson R, Kanthakumar K, et al. Oxidant-mediated ciliary dysfunction in human respiratory epithelium. 1994;17:1-10.

6. **PROF. RAS: PLEASE SUPPLY COMPLETE REFERENCE (Authors, title, page numbers):** Am Rev Respir Dis 1993;148:**XX-XX.**

7. Ras GJ, Anderson R, Taylor GW, et al. Pro-inflammatory interatctions of pyocyanin and 1-hydroxyphenazine with human neutrophils *in vitro*. J Infect Dis 1990;162:178-185.

8. Ras GJ, Anderson R, Taylor GW, et al. Clindamycin, erythromycin and roxithromycin inhibited the pro-inflammatory interactions of *Pseudomonas aeruginosa* pigments with human neutrophils *in vitro*. Antimicrob Agents Chemother 1992;36:1236-1240.

Table 1: Immunoevasive Activities of Pseudomonas aeruginosa

- Inactivation of humoral immunity
- Inhibition of T-cell-mediated immunity
- T-cell, polymorphonuclear cell, and macrophage inactivation
- Impairment of opsonic phagocytosis
- Impairment of nonopsonic phagocytosis
- Suppression of cellular immunity
- Inhibition of natural killer cell cytotoxicity and chemotaxis
- Inactivation of proteinase inhibitor

Figure: Chronic inflammation and neutrophil activation damage the "innocent bystander," ciliated epithelium.

The Significance of Occupational and Environmental Asthma, and Mechanisms of Lung Injury

Occupational and environmental asthma are major categories among all cases of asthma. Identification of their causes in individuals and determination of the extent to which they contribute to the prevalence of asthma in the population are important if reduction in the incidence of the disease is to be successful.

Causes of Occupational Asthma

The causes of occupational asthma can be broken down into two categories, explained Prof. Anthony Newman Taylor, National Heart and Lung Institute, London. Some substances induce the disease in previously healthy individuals, while others incite or provoke bronchoconstriction in patients with pre-existing airway hyperresponsiveness.

Asthma may be induced by a toxic chemical (irritant-induced) or as the outcome of a hypersensitivity reaction (hypersensitivity-induced). Both cause damage of the airway epithelium and resultant inflammation. Two types of chemical entities cause hypersensitivity. One is organic compounds, including animal, vegetable, and microbial proteins. The other is synthetic low-molecular-weight chemicals, which include acid anhydrides, complex platinum salts, isocyanates, and antibiotics.

Diagnosis

An accurate diagnosis of occupational asthma is critical for ensuring that the intervention is appropriate. For a patient with respiratory symptoms, three diagnostic approaches are used: inhalation tests, peak flow measurements, and immunologic tests.

While peak flow and immunologic tests are increasingly used today, inhalation tests remain the gold standard. One reason is that while peak flow and immunologic

measurements are very sensitive tests, their specificity is poor. Also, skin prick testing, the primary immunologic test in use today, does not identify hypersensitivity to several low-molecular-weight chemicals, including isocyanate, plicatic acid, and colophony (rosin).

An interesting finding from studies of inhalation challenge in individuals who have become sensitized to a substance is that after the FEV_1 returns to normal, the histamine PC_{20} remains low, indicating continued hypersensitivity to nonspecific stimuli such as exercise and cold air. This explains why patients with occupational asthma frequently have symptoms of hyperresponsiveness despite a normal FEV_1.

Extent of the Problem

Prof. Newman Taylor discussed the importance of occupational asthma as a cause of respiratory disease in the community.

The annual incidence of occupational asthma in the United Kingdom from 1989 to 1991 was 509 cases, according to a survey of respiratory and occupational physicians. This represents an overall incidence of about 22 cases per million population per year. These figures are probably underestimates, Prof. Newman Taylor noted; he estimates some 1,500 to 2,000 cases per year in the U.K., making occupational asthma a substantial problem.

The most important causative agents were diisocyanates, which accounted for nearly one-fourth of all cases. When looked at by industry, spray painters had the highest incidence (658 cases per million per year), followed by chemical workers (364 cases) and plastic workers (337 cases).

As to prevalence of occupational asthma, a number of studies estimate that it is in the order of 10% to 15%. This rate is probably an overestimate, however, because it is based on work-related respiratory symptoms rather than a specific diagnosis. Three factors that appear to be related to prevalence are exposure, atopy, and smoking.

Likelihood of Developing Asthma

Prof. Newman Taylor described a prospective study of workers newly exposed to laboratory animals. About one-fourth had symptoms of allergy, and some 10% had asthma. The study focused on exposure to rat urine, which contains the proteins that cause hypersensitivity. Respiratory symptoms and a positive skin prick test occurred most frequently in workers with the highest exposure to rat urine, such as animal technicians. Also, atopic individuals and cigarette smokers were more easily sensitized on exposure to the urine.

Prof. Newman Taylor noted that the risk of asthma was greatest in the first one to two years of exposure. It is probable that intensity of exposure during this period is of greater importance than cumulative exposure.

Intervention

Several studies have shown that about 50% of people with occupational asthma continue to have disease several years after their exposure has ceased. In one study of snow-crab processing workers, FEV_1 normalized after one year of avoidance. However, while airway hyperresponsiveness improved in first year for most patients, there was no further improvement after two years, demonstrating incomplete resolution of the disease despite avoidance of exposure. This phenomenon was not due to inadvertent exposure, since IgE levels specific to snow-crab antigen fell during the period of follow-up. This fact--that persistent asthma does not require continuing exposure to the initiating cause--has important implications: in patients diagnosed with "intrinsic asthma," the

disease may well have been caused by exposure to an asthma-inducing agent (such as a virus infection) but to which exposure no longer occurs.

The only factor that has been identified as a determinant of continuing asthma is the duration of exposure after the onset of symptoms. Consequently, early diagnosis is important. Workers who have developed symptoms should be told that if they continue to be exposed, it is more likely that asthma will become chronic. This does not mean, however, that they should be advised to change their jobs.

Avoidance of exposure may take many forms, including elimination or substitution, enclosure of the process or product, or using exhaust ventilation. Often, however, these measures are not very practical. Instead, the individual should be protected. Respiratory protection, either by using a device to prevent inhalation of the provocative agent or by relocation to another area of the workplace, is more realistic. In the case of relocation, it is important to ensure that there is no inadvertent exposure; this can be determined by follow-up peak flow measurements.

The Problem of Environmental Asthma

Two of the central problems in respiratory medicine are why asthma is becoming more common and why there are geographic differences in prevalence. These problems were addressed by Prof. Newman Taylor, who emphasized that both environmental and genetic factors play an important role. For one thing, there is good evidence that atopy has an important genetic component, although its nature remains controversial.

Migrant studies have been useful in uncovering some of the factors related to geographic variation. Although useful, these studies have used different methodologies. One study, of migrants from a small island to the mainland of New Zealand, showed a doubling of the risk of asthma in the first generation born on the mainland, as compared

with the comparable population on the island of origin. This is too rapid for a genetic change to have occurred.

Another study, of the differences in the atopy and asthma rate between urban areas in East and West Germany, showed that the rate of atopy in West Germany was double that in East Germany. The asthma rate was also higher in the western sector. However, when standardized for atopy, the asthma rates for the two populations were the same; the increased asthma rates in West Germany were the consequence of increased rates of atopy.

Asthma on the Increase

The prevalence of asthma has increased during the last 20 to 30 years. Several studies show that this increase cannot be attributed to changes in diagnostic fashion. In one study of respiratory symptoms and exercise-induced asthma in school children in South Wales, which was conducted in 1973 and 1988 using the same methodology on both occasions, the prevalence of both symptoms and the fall in FEV_1 provoked by exercise was significantly increased in 1988.

There is evidence that atopy is a determinant of the risk of developing asthma and that the major histocompatibility complex (MHC) haplotype is associated with atopy. Prof. Newman Taylor and his co-workers conducted a study that showed an association between the specific IgE response to acid anhydrides and the HLA haplotype. He found an excess of HLA-DR3, an MHC class II gene, in patients sensitized to acid anhydrides, as compared with a control group; this suggests that the HLA haplotype plays a role in the specificity of the IgE response.

Environmental factors related to exposure to specific allergens or haptens also contribute to the likelihood of developing asthma. Intensity during the early period of exposure is of greater importance than cumulative exposure.

Indoor allergens, especially house dust mite, contribute strongly to the development of asthma. A study of adult asthmatics in Papua New Guinea found that the prevalence increased markedly between 1974 and 1985, corresponding to a time in which blankets infested with the house dust mite had been imported. Some 80% of asthmatics in this population had positive skin-prick reactions to house dust mite, as compared with 20% of nonasthmatic controls.

Modifying factors are important determinants of risk. Cigarette smoking increases the risk of developing asthma, but the role of respiratory irritants is less clear. Viral respiratory infections may also be an important risk factor.

A study described by Prof. Newman Taylor showed that the prevalence of airway hyperresponsiveness was marginal in young adults and the elderly, and that this is related both to atopy and smoking. The effect of smoking in later life is probably mediated through a reduced FEV_1.

Studies of occupational asthma have provided considerable information about the relationship between environmental exposure and the development of asthma. First, there is likely a window of vulnerability during the period of initial exposure to a novel antigen. During this period, modifying environmental factors also operate. Further, changes in the environment are particularly important. These include birth, a new or changed work situation, the introduction of a new allergen into the environment (exemplified by the well-known case of soya bean in the Barcelona harbor), and a move into a new environment.

Turning to the development of asthma in early childhood, Prof. Newman Taylor noted that much is still to be learned. While it is known that wheezing is more common in households with smokers, it is not known whether this is due to smoke or to recurrent viral respiratory infections, since about 80% of children with wheezing have had such infections but do not have asthma. However, wheezing episodes in infants are related to lung size at birth, which is reduced in offspring of women who smoke during pregnancy. Whatever the reason, the increased prevalence of asthma in the UK has paralleled an increase in maternal smoking.

Prof. Newman Taylor offered another possible explanation for an increased incidence of asthma, which is based on the number of older siblings in a household. The greater the number of older siblings, the less is the risk of atopy. The fewer the number of older siblings, the later in life a respiratory infection is likely, since these infections are acquired in school and brought back to the home. The reduced prevalence of atopy among children with older siblings may be a consequence of respiratory infection acquired earlier in childhood. The increased incidence in asthma may be a reflection of smaller family size.

Free Radicals and Mechanisms of Lung Injury

Free radicals may be defined as any species with one or more unpaired electrons. In organic molecules of biological systems, many atoms can exist as free radicals, including oxygen, carbon, nitrogen, phosphorus, and sulfur.

With respect to tissue injury, the prevalence of oxygen makes the oxygen-centered radicals the most common and relevant, according to Dr. Mairam Gulumain, National Centre for Occupational Health and Department of Medical Biochemistry, University of Witwatersrand, Johannesburg. In these systems, oxygen-centered radicals are produced during the step-wise reduction of the oxygen molecule to produce water. In this

process, the superoxide anion is the first radical generated; upon combination with a proton, it produces a more reactive species, the hydroperoxyl radical. In acidic conditions, such as in the vacuoles of the phagocytic cells in the lung, the reactivity of the hydroperoxyl radical can therefore be more relevant after oxidative burst than the superoxide anion radical. The latter radical can also react with nitric oxide to generate peroxynitrite, an intermediate that can decompose to a strong oxidant with reactivity similar to that of the hydroxyl radical.

The combination of two superoxide radicals produces hydrogen peroxide. This combination is much faster in the presence of the enzyme superoxide dismutase. Although hydrogen peroxide is not a radical, it can interact with ferrous ion to produce the highly reactive hydroxyl radical. Hydrogen peroxide can also react with chloride anion in the presence of the polymorphonuclear leukocyte (PMN) enzyme myeloperoxidase to produce hypochlorous acid. The same H_2O_2-myeloperoxidase-Cl^- system of PMN is also used to chlorinate an exogenous amine to form N-chloroamines, a much longer-lived species than hypochlorous acid or oxygen-centered radicals.

Free-radical Injury

Oxygen-centered radicals and their reactive metabolites in the lung are potentially harmful because they interact with and modify a variety of biomolecules. In the case of lipids, peroxidation results in changes of membrane permeability and lipid-protein interactions. Peroxidation of lipids also generates new radicals, lipid hydroperoxides, and different end-products, all of which contribute to cell damage in the lung.

One effect of radicals on proteins is deactivation of enzymes such as glutamate synthetase and copper-zinc-containing superoxide dismutase, and also the deactivation of protease inhibitors such as α_1-PI. Other effects are alterations of receptor mechanisms, including the inactivation of ß-adrenoceptors of lung membranes, as well as changes in ion transport leading to increased calcium accumulation inside the cell.

Free radicals and the oxidative stress they produce affect the transcription of many genes through the activation of transcription factors AP-1 and NF- B. The activation of the latter induces the synthesis of many cytokines. Free radicals and oxidative stress, for example, have been shown to induce IL-8, a potent activator of neutrophils, through regulation of IL-8 gene expression. They have also been shown to increase the expression of proto-oncogenes, various proteases such as collagenases and plasminogen activators, and p53, a tumor suppression gene product that mediates arrest of the cell cycle at G_2 after DNA damage. The main radical responsible for DNA damage in the form of modified bases and strand breaks is the hydroxyl radical. Such damage activates the nuclear enzyme poly-ADP ribose polymerase, which is involved in repair of DNA lesions. Activation of this enzyme, however, diminishes cellular NAD and ATP, the energy sources of the cell, leading to cell injury and death.

Free Radicals and Cigarette Smoking

Cigarettes are a major source of free radicals, which are present in abundance in the gas phase and the tar phase. In addition, smoking causes free radicals to be produced by pulmonary and circulating phagocytes, observed Prof. Ronnie Anderson, University of Pretoria, South Africa. These free radicals are responsible for oxidant-mediated pulmonary dysfunction and disease because they are cytotoxic, immunosuppressive, carcinogenic, proadhesive, proproteolytic, and proatherogenic.

A number of studies have found a correlation between high circulating leukocyte counts, which are seen in smokers, and both cardiovascular disease and cancer. Other proinflammatory effects of smoking, which also contribute to smoking-related disease, are shown in Table 1.

Among the many markers of oxidative stress in smokers (Table 2) is an increased turnover of vitamins C and E and beta-carotene. These vitamins are the most important

nutrients that defend against oxidative processes, acting as scavengers of reactive oxidants and being depleted in the process. A number of studies show statistically significant inverse correlations between plasma vitamin C levels and smoking, and between plasma vitamin C and beta-carotene levels and circulating leukocyte and neutrophil counts.

Another finding in recent studies is a significant positive correlation between dietary intake of vitamin C and beta-carotene and pulmonary function, as measured by FEV_1.[1] The absolute differences are small, but over a period of years they could have a clinically meaningful effect on the decline in lung function. Also, vitamin C prevents cigarette-smoke-induced leukocyte aggregation and adhesion to arterioles, venules, and aortic endothelium in experimental animals.[2]

In contrast, high plasma levels of vitamin E correlate positively with circulating leukocytes and neutrophils, possibly because vitamin E is a mobilizable antioxidant and may in fact be mobilized from tissue stores during periods of oxidative stress. As to the relationship between vitamin E and lung function, there is an inverse correlation in smokers but a direct one in nonsmokers.

In conclusion, Prof. Anderson stated that antioxidant nutrients are probably a primary determinant of susceptibility to oxidant-mediated disease.

References

1. Schwartz J and Weiss ST. Relationship between dietary vitamin C intake and pulmonary function in the first National Health and Nutrition Examination Survey (NHANES) I). Am J Clin Nutr 1994;59:110-114.

2. Lehr H-A, Frei B, and Arfors K-E. Vitamin C prevents cigarette smoke-induced leukocyte aggregation and adhesion to endothelium in vivo. Proc Natl Acad Sci USA 1994;91:7688-7692.

Table 1. Proinflammatory Effects of Smoking

- Retention of neutrophils in the pulmonary microvasculature
- Leukocyte aggregation and adhesion to endothelium *in vivo*
- Altered expression of adhesion molecules on circulating neutrophils
- Increased numbers of circulating neutrophils and monocytes
- Increased oxidant production by neutrophils and macrophages
- Increased content of myeloperoxidase in neutrophils
- Increased release of myeloperoxidase and elastase by neutrophils *in vivo*

Table 2. Markers of Oxidative Stress in Smokers

- Increased turnover of vitamin C, beta-carotene, and vitamin E
- Activation of genes coding for antioxidant enzymes in lungs
- Accelerated inactivation of α_1-protease inhibitor
- Increased frequency of sister chromatid exchanges
- Pulmonary dysfunction, cardiovascular disease, and cancer

RUDER FINN INCORPORATED
Schedule of Publications on Behalf of
DET NORSKE VERITAS
For Six month period Ending March 27, 1995

Description of Publications	By Whom Written, Edited or Prepared	By Whom Printed, Produced or Published	By Whom Distributed
Releases:			
1. None			

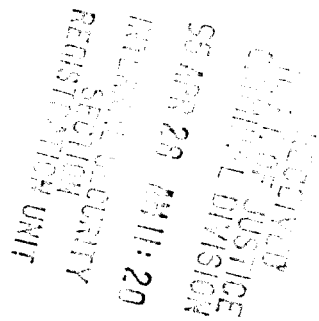
Describe fully all activities of Registrant during the period for or in the interest of each foreign principal.

During the six months, Ruder Finn was engaged in the following activities on behalf of Det Norske Veritas:

1. None

RUDER FINN INCORPORATED
Schedule of Publications on behalf of
Gilat Satellite Networks
For Six Month Period Ending March 27, 1995

Description of Publication	By Whom Written, Edited or Prepared	By Whom Printed, Produced or Published	By Whom Distributed
1. Third Quarter Earnings for Gilat 10/31/94	Gilat Satellite/ Ruder Finn	Ruder Finn	Ruder Finn
2. First Rural Telephony Contract 5/10/94	Gilat Satellite/ Ruder Finn	Ruder Finn	Ruder Finn
3. Fourth Quarter Year-End Earnings 2/21/95	Gilat Satellite/ Ruder Finn	Ruder Finn	Ruder Finn



Describe fully all activities of Registrant during the period for or in the interest of each foreign principal.

During the six months, Ruder Finn was engaged in the following activities on behalf of Gilat Satellite Networks:

1. Preparing press releases for announcing company developments for distribution in U.S.
2. Preparing business earnings announcements/press releases for distribution in the U.S.
3. Implementing a company "road show" in New York, NY, Boston, MA with company management.
4. Maintaining company contact list of members of financial community and shareholders.
5. Arranged quarterly conference calls on earnings releases.

NEWS RELEASE

RUDER·FINN

FOR IMMEDIATE RELEASE

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GILAT ANNOUNCES RECORD RESULTS FOR THE FOURTH QUARTER AND YEAR OF 1994

Tel Aviv, Israel, February 21, 1995 -- Gilat Satellite Networks Ltd. (NASDAQ: GILTF) reported today revenues of US$27.01 million for the year ended December 31, 1994, a 60% increase over the sales for 1993, which were US$16.93 million. Net income for 1994 was US$6.10 million (US$0.73 per share), an increase of nearly 50% over the US$4.13 million (US$0.53 per share) posted in 1993.

Revenues for the fourth quarter ended December 31, 1994, were US$9.32 million, more than a 70% increase over the US$5.32 million result for the same period in 1993. Net income for the fourth quarter was US$2.25 million (US$0.27 per share), compared with US$1.64 million (US$0.20 per share) for the final quarter of last year.

As of December 31, 1994, the backlog stood at approximately US$17.5 million, compared to US$7.9 million announced at the end of 1993.

Revised Agreement with GTECH

Gilat successfully renegotiated its March 1993 master agreement with GTECH, a world leader in on-line lottery and gaming systems. Under the revised terms, the total value of the

agreement to Gilat is expected to increase by approximately 25%.

Joint Venture in China

Gilat has entered, in a minority position, into an Engineering Joint Venture agreement (EJV) between three partners, in Shenzhen, China. The most notable partner in the EJV is the Shenzhen city government itself, acting through three wholly-owned subsidiaries (one of which is the Shenzhen PTT); the other partner is Xenexi Telecommunications Development Inc., a Canadian company headed by Chinese entrepreneur Dr. Steven Wan.

The EJV, (formally known as the "Shenzhen Early Bird Satellite Communications Engineering Corp."), intends to market Gilat's entire product line to users throughout China via a Chinese operating company, as is required by local law. The EJV will also provide technical support, maintenance and leasing services. Gilat has received on order from the EJV for OneWay™, TwoWay™ and FaraWay™ networks, all scheduled for delivery in 1995.

Other Recent Orders

Siamsat ordered an initial network consisting of a TwoWay hub station and 100 remote sites to be used for credit/debit card authorization. This contract represents Gilat's first TwoWay order from Thailand. **GTECH** ordered additional TwoWay VSAT Outdoor Units, hub equipment and related software for its on-line lottery networks. And **ICG Wireless** (formerly Nova-Net) ordered its own dedicated TwoWay hub as well as 250 additional remote sites for the SCADA networks it operates. Most items contained in these three orders are slated for delivery in 1995.

Gilat President and Chief Executive Officer Yoel Gat remarked, "We entered 1995 with a record backlog and excellent forward momentum, and expect our installed base to continue to grow."

Siamsat is a telecommunications service provider owned, in part, by the Crown Property Bureau. It is one of five firms licensed to offer VSAT services throughout Thailand.

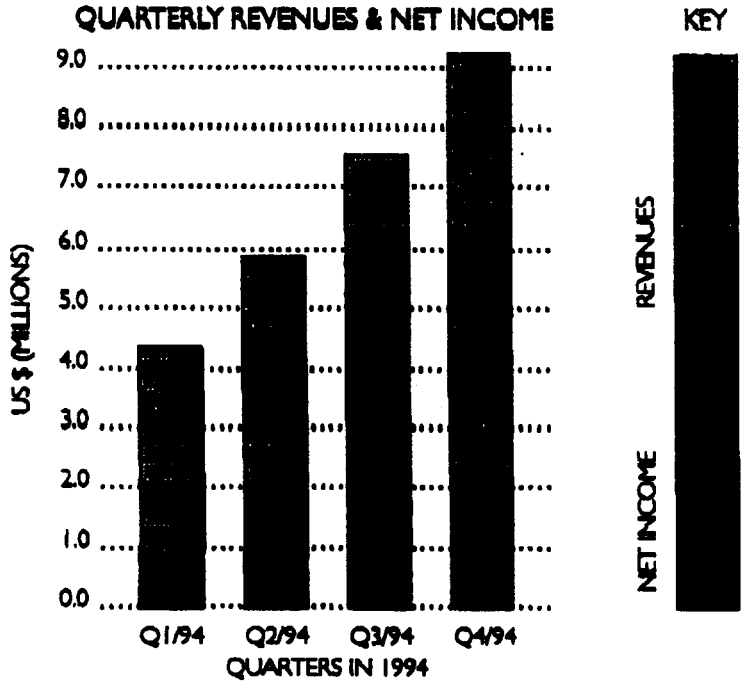
Gilat Satellite Networks Ltd. designs, develops, manufactures, markets and supports Very Small Aperture Terminal (VSAT) satellite earth stations, hub equipment and related software products. The products are primarily incorporated into private telecommunications networks, which provide satellite-based communications between a central location and a large number of geographically-dispersed sites.

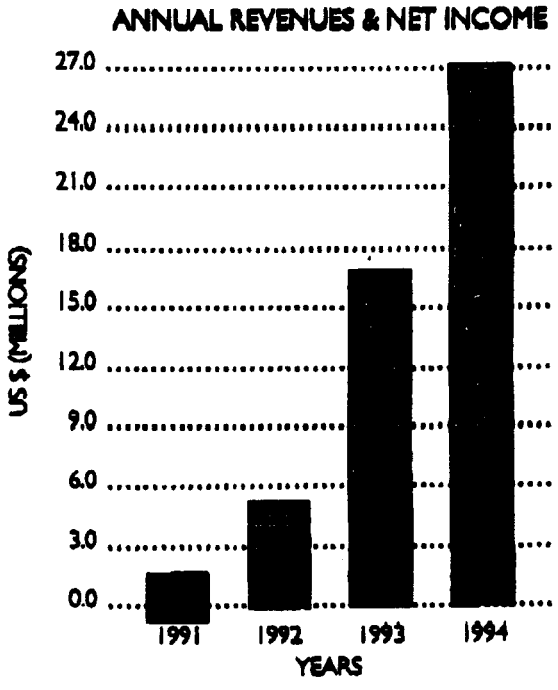
Gilat Satellite Networks Ltd.

(An Israeli Corporation)

Condensed Consolidated Statements of Income

US Dollars in Thousands	Year ended December 31		Three months ended December 31	
	1994	1993	1994	1993
	(Audited)	(Audited)	(Unaudited)	(Unaudited)
Sales	$27,009	$16,933	$9,325	$5,322
Cost of Sales	14,327	9,285	5,288	2,729
Gross Profit	12,682	7,648	4,037	2,593
Research and Development Costs:				
Expenses incurred	2,795	1,650	811	384
Less - grants	1,397	798	412	171
Net R&D	1,398	852	399	213
Selling, General and Administrative Expenses	5,269	3,116	1,435	935
Operating Income	6,015	3,680	2,203	1,445
Financial Income - net	89	456	47	195
Other Expenses - net	(2)	(3)	(2)	(3)
Net Income	$6,102	$4,133	$2,248	$1,637
Earnings Per Share	$0.73	$0.53	$0.27	$0.20
Weighted Average Number of Shares Outstanding - in Thousands	8,408	7,811	8,448	8,373





Gilat Satellite Networks Ltd.

(An Israeli Corporation)

Condensed Consolidated Balance Sheets

US Dollars in Thousands	December 31 1994 (Audited)	December 31 1993 (Audited)
Assets		
Current Assets:		
Cash and cash equivalents	$6,367	$17,774
Marketable securities	2,123	4,013
Accounts receivable:		
Trade	5,080	4,390
Israeli government departments & agencies	2,030	1,195
Other	1,245	448
Inventories	8,841	4,803
Prepaid expenses	244	88
Total current assets	25,930	32,711
Investments and Non-Current Receivable		
Long term bank deposit	5,363	
Other investment and non-current receivable	378	
	5,741	
Property, Plant and Equipment:		
Cost	10,794	2,467
Less - accumulated depreciation & amortization	1,187	495
	9,607	1,972
	$41,278	$34,683
Liabilities and Shareholders' Equity		
Current Liabilities:		
Short-term bank credit	$185	$612
Current maturities of long-term debt	106	84
Accounts payable and accruals:		
Trade	1,470	1,493
Other	1,805	779
Advances from customers	664	795
Total current liabilities	4,230	3,763
Long-Term Debt, net of current maturities	50	156
Accrued Severance Pay	366	234
Total liabilities	4,646	4,153
Shareholders' Equity:		
Share capital	31	31
Share premium	27,825	27,825
Retained earnings	8,776	2,674
	36,632	30,530
	$41,278	$34,683

NEWS RELEASE

RUDER·FINN

FOR IMMEDIATE RELEASE

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(212) 715-1573

COMPANY CONTACT: Yoav Leibovitch
Gilat Satellite Networks Ltd.
Tel Aviv, Israel
Tel. (972) 3-499068

GILAT ANNOUNCES FIRST RURAL TELEPHONY CONTRACT

October 11, 1994, Tel Aviv, Israel -- Gilat Satellite Networks Ltd. (NASDAQ: GILTF), reported today the first sale of its FaraWay™ VSAT rural telephony network -- to **Comincom,** a provider of telecommunications services in **Russia.**

The Faraway VSAT is a satellite network designed to provide telephone and fax services to rural areas and developing countries, that lack an adequate telecommunications infrastructure.

Situated in Moscow, Comincom is a telecom operator established by a bank and two departments of the Russian Ministry of Foreign Affairs. It is licensed to offer local, long-distance and international telephone services to over 65% of the Russian land mass. Comincom placed an initial order for a Network Control Center ("hub") and remote sites to serve several regions in that country.

This order -- also the Company's first sale in Russia -- is worth approximately US$1.4 million to Gilat, and is scheduled for delivery in 1995.

Gilat President and Chief Executive Officer Yoel Gat stated, "The Comincom deal represents two "firsts" -- our first rural telephony contract and our first penetration into the Russian marketplace."

Gilat Satellite Networks Ltd. designs, develops, manufactures, markets and supports Very Small Aperture Terminal (VSAT) satellite earth stations, hub equipment and related software products. The products are primarily incorporated into private telecommunications networks, which provide satellite-based communications between a central location and a large number of geographically-dispersed sites.

# # #

NEWS RELEASE

RUDER·FINN

FOR IMMEDIATE RELEASE

COMPANY CONTACT: Yoav Leibovitch
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212-715-1573

GILAT REPORTS RECORD SALES AND RECORD EARNINGS FOR THE THIRD QUARTER AND FIRST NINE MONTHS OF 1994

October 31, 1994, Tel Aviv, Israel -- Gilat Satellite Networks Ltd. (NASDAQ: GILTF) announced today sales of US$7.44 million for the third quarter ended September 30, 1994, an increase of more than 50 percent over the third quarter of 1993, when the Company reported revenues of US$4.83 million. Net income was US$1.74 million (US$0.21 per share), compared with US$1.22 million (US$0.15 per share) for the same period last year.

Sales for the nine months ended September 30, 1994, were US$17.68 million, an increase of more than 50 percent over the same period in 1993, when the Company had revenues of US$11.61 million. Net income was US$3.85 million (US$0.46 per share) compared with US$2.50 million (US$0.33 per share) for the nine months ended September 30, 1993.

Third Quarter Highlights

- GTE Spacenet ordered a TwoWay™ VSAT network consisting of a hub station and 1200 sites for **Winn Dixie**, a major **US** supermarket chain.

- o Gilat sold its first FaraWay™ VSAT rural telephony product to **Comincom,** a provider of telecommunications services in **Russia**, and the Company's first customer in that country.
- o GTECH shipped over 1000 GSAT™ terminals to the **UK Lottery,** which is fast becoming the largest VSAT network in Europe. GTECH also ordered equipment and software for the expansion of their hub stations in the **UK** and **Poland.**

Yoel Gat, president and chief executive officer of Gilat, remarked, "The third quarter was significant for Gilat. We sold our first rural telephony VSAT, and are excited about the growth opportunities in this product area. GE Americom concluded its acquisition of GTE Spacenet during this period, as well, and we look forward to continued close cooperation with them."

Third Quarter Orders

TwoWay VSAT: Related orders for GTE Spacenet's *Skystar Advantage™* service, including the previously announced Winn Dixie contract, totaled **US$4.5 million. GTECH** orders for hub expansion equipment, software and services for its *GSAT* terminals amounted to some US$2.6 million.

OneWay™ VSAT: Orders from clients in **China, Thailand, the UK, France** and **Argentina** were worth approximately **US$1.4 million.**

FaraWay VSAT: As previously announced, the **Comincom** network in **Russia** sold for approximately **US$1.4 million.**

Gilat Satellite Networks Ltd. designs, develops, manufactures, markets and supports Very Small Aperture Terminal (VSAT) satellite earth stations, hub equipment and related software products. The products are primarily incorporated into private telecommunications networks, which provide satellite-based communications between a central location and a large number of geographically-dispersed sites.

Gilat Satellite Networks Ltd.

(An Israeli Corporation)

Condensed Consolidated Statements of Income

	Nine months ended September 30		Three months ended September 30	
	1994 (Unaudited)	1993 (Unaudited)	1994 (Unaudited)	1993 (Unaudited)
Sales	$17,684,110	$11,611,143	$7,440,398	$4,834,632
Cost of Sales	9,039,347	6,556,463	3,968,152	2,705,354
Gross Profit	8,644,763	5,054,680	3,472,246	2,129,278
Research and Development Costs:				
Expenses incurred	1,984,314	1,265,355	775,347	415,646
Less - grants	985,777	626,917	396,669	199,417
Net R&D	998,537	638,438	378,678	216,229
Selling, General and Administrative Expenses	3,834,498	2,180,965	1,443,349	840,974
Operating Income	3,811,728	2,235,277	1,650,219	1,072,075
Financial Income - net	41,798	261,191	85,762	147,028
Net Income	$3,853,526	$2,496,468	$1,735,981	$1,219,103
Earnings Per Share	$0.46	$0.33	$0.21	$0.15
Weighted Average Number of Shares Outstanding	8,373,150	7,606,683	8,373,150	8,373,150

Gilat Satellite Networks Ltd.

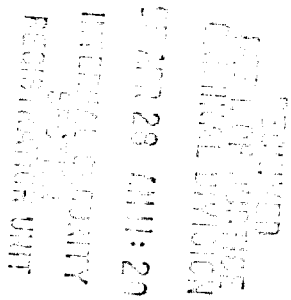
(An Israeli Corporation)

Condensed Consolidated Balance Sheets

	September 30 1994 (Unaudited)	December 31 1993 (Audited)
Assets		
Current Assets:		
Cash and cash equivalents	$6,681,740	$17,774,049
Marketable securities	2,842,326	4,013,277
Accounts receivable:		
Trade	3,550,943	4,390,052
Israeli government departments & agencies	2,150,059	1,194,479
Other	626,141	447,925
Invertories	8,666,848	4,803,019
Prepaid expenses	125,170	87,521
Total current assets	24,643,227	32,710,322
Investment and Long Term Receivables	5,438,977	
Property, Plant and Equipment:		
Cost	9,884,056	2,467,090
Less - accumulated depreciation & amortization	994,703	494,857
	8,889,353	1,972,233
	$38,971,557	$34,682,555
Liabilities and Shareholders' Equity		
Current Liabilities:		
Short-term bank credit	$439,518	$611,729
Current maturities of long-term debt	105,933	83,731
Accounts payable and accruals:		
Trade	1,093,079	1,493,461
Other	1,320,197	778,860
Advances from customers	1,219,349	794,890
Total current liabilities	4,178,076	3,762,671
Long-Term Debt, net of current maturities	77,227	156,217
Accrued Severance Pay	333,294	234,233
Total liabilities	4,588,597	4,153,121
Shareholders' Equity:		
Share capital	30,517	30,517
Share premium	27,825,566	27,825,566
Retained earnings	6,526,877	2,673,351
	34,382,960	30,529,434
	$38,971,557	$34,682,555

RUDER FINN INCORPORATED
Schedule of Publications on behalf of
The Israel Land Development Co.
For Six Month Period Ending March 27, 1995

Description of Publication	By Whom Written, Edited or Prepared	By Whom Printed, Produced or Published	By Whom Distributed
1. Third Quarter Financial Results 11/29/94	ILDC/Ruder Finn	Ruder Finn	Ruder Finn
2. ILDC to Bring Motel Concept to Israel 12/15/94	ILDC/Ruder Finn	Ruder Finn	Ruder Finn
3. ILDC Declares Dividend 3/13/95	ILDC/Ruder Finn	Ruder Finn	Ruder Finn



Describe fully all activities of Registrant during the period for or in the interest of each foreign principal.

During the six months, Ruder Finn was engaged in the following activities on behalf of Israel Land Development Company:

1. Prepared and distributed 1994 Third Quarter results release.
2. Prepared and distributed ILDC to Bring Motel Concept to Israel release.
3. Organized financial community meetings, January 25-27, 1995 in New York.
4. Maintained company contact lists.
5. Assisted in preparing corporate presentation.
6. Prepared and distributed dividend release.

NEWS RELEASE

RUDER·FINN

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Company Contact: **Ron Weissberg**
Chief Financial Officer
011-972-3-520-02

FOR IMMEDIATE RELEASE

ILDC REPORTS THIRD QUARTER AND NINE MONTHS RESULTS

Tel Aviv, Israel, November 29, 1994. The Israel Land Development Company, Ltd., ("ILDC") (NASDAQ:/NMS Symbol:ILDCY) today announced results for the third quarter and nine months ended September 30, 1994.

Revenues for the three months ended September 30, 1994 were NIS 153.0 (approximately U.S. $50.8 million) compared with revenues of NIS 173.3 (approximately U.S. $57.5 million) for the same period last year. This decrease is mainly the result of a reduction in advertising revenue at the company's newspaper due to the fact that Israel's major holidays fell during the third quarter and, therefore, 25 percent of the production days were lost and four "holiday" editions had to be published. The company experienced a consolidated net loss of NIS 4.5 million (approximately U.S. $1.5 million) or NIS -0.16 (U.S. $-0.05) per share for the quarter ended September 30, 1994 compared to a consolidated net profit of NIS 7 million (approximately US $2.3 million) or NIS 0.20 (U.S. $0.07) per share for the same period last year. This decrease is mainly the result of the reduction in revenue for the period and the continued aggressive growth in the company's subsidiaries, I.L.D. Insurance and NATALI, both of which have high acquisition costs associated with acquiring new business.

Revenues for the nine months ended September 30, 1994 increased to NIS 526.4 million (approximately U.S. $174.7 million) as compared to NIS 473.3 million (approximately US $157.1 million) for the same period last year. The company reported a consolidated net profit of NIS 17.5 million (approximately US $5.8 million) or NIS 0.57 (U.S. $0.19) per share for the first nine months of the year as compared to NIS 18.6 million (approximately U.S. $6.2 million) or NIS 0.61 per share (U.S. $0.20) for the first nine months of 1993.

ILDC's total assets as of September 30, 1994 increased 12.5 percent to NIS 1.36 billion (U.S. $451.9 million) compared with NIS 1.21 billion (U.S. $401.6 million) as of December 31, 1993. This growth came mainly from the initial public offerings of the company's subsidiaries, Ma'ariv Holdings, Ltd., and Hed Arzi Ltd., and an increase in insurance reserves.

Shareholders' equity at September 30, 1994 was NIS 474.4 million (approximately U.S. $157.5 million) compared with NIS 440.5 million (approximately U.S. $146.2 million) at December 31, 1993. This increase is partially due to the conversion of debentures (Series 6) amounting to NIS 7.4 million and net profit of the ILDC group of NIS 17.5 million.

The company's long term liabilities as of September 30, 1994 were NIS 302.7 million (approximately U.S. $100.5 million) compared to NIS 250.8 million (approximately U.S. $83.2 million) as of December 31, 1993. This increasse is due to issuing NIS 70.8 million in convertible debentures of ILDC's subsidiary, Ma'ariv Holdings, offset by the partial conversion of debentures in ILDC and ILD Hotels.

The company's financing expenses for the three months ended September 30, 1994 were NIS 1.3 million (approximately U.S. $0.43 million). Even though the Tel Aviv Stock Exchange has been negatively impacted by recent economic instability and an increase in inflation, the

company showed a capital gain of NIS 0.6 million (approximately U.S. $0.2 million) from its securities portfolio, which averaged NIS 93.4 million (approximately U.S. $31.0 million), for the quarter ended September 30, 1994, not including cash and cash equivalents of NIS 125 million (approximately U.S. $41.5 million).

Financing expenses for the nine months ended September 30, 1994 were NIS 20.8 million (approximately U.S. $6.9 million) compared to NIS 2.1 million (approximately U.S. $0.70 million) for the same period last year. These expenses included NIS 14.4 million, which was a capital loss on the Tel Aviv Stock Exchange. The company received a capital gain of NIS 25.6 million from the sale of MA'ARIV shares and a capital gain of NIS 7.5 million from the sale of Hed Arzi shares.

ILDC's real estate division purchased 12,698 square meters of land (approximately 3.14 acres) in Rishon LeZion from the Israeli government for NIS 19 million. The company plans to build four residential buildings totalling 176 apartments. According to the time schedule set forth in the contract with the government, the project will be completed by 1997. During the third quarter ended September 30, 1994, the Company sold 7 duplexes in the village project, bringing the total sold for the nine months to 58 duplexes and 11 homes, none of which are included in the company's profit and loss statements due to an accounting procedure whereby no sales are reported until 90 percent of the project is completed and 75 percent of it is sold. Construction is continuing on a four-story commercial/retail building of 4000 square meters (approximately 43,000 square feet) in Rishon Lezion. Revenue from this division's income properties portfolio for the three months ended September 30, 1994 was NIS 7.5 million (approximately U.S. $2.5 million) compared to NIS 6.4 million (approximately U.S. $2.1 million) for the same period last year. Operating profit for the income properties division was NIS 5.3 million (approximately U.S. $1.8 million) for the three months ended September 30, 1994, an increase of 32 percent over the same period last year.

The Company's media division showed an operating profit of NIS 0.4 million (approximately U.S. $0.13 million) for the three months ended September 30, 1994 compared to a profit of NIS 6.3 million (approximately U.S. $2.1 million) for the same period last year. The company's Ma'ariv division showed revenue for the third quarter ended September 30, 1994 of NIS 66.3 million (approximately US $22 million) compared to NIS 72.0 million (approximately U.S. $23.9 million) for the same period last year. Ma'ariv had an operating loss of NIS 1.0 million (approximately U.S. $0.33 million) for the three months ended September 30, 1994, compared with an operating profit of NIS 3.6 million (approximately U.S. $ 1.19 million) for the same period last year. This decline was mainly the result of a decrease in the newspaper's advertising revenue due to the fact that Israel's major holidays fell during the third quarter and no newspapers were published on those days. The Ma'ariv division signed a contract to purchase equipment to count and expedite the distribution of the newspaper in order to expand production. This equipment is expected to be operational in 1995. The newspaper's subscription department has doubled the number of subscribers since its establishment in 1993 and has recently expanded its services to include home subscriptions in areas not previously covered. The newspaper business in Israel continues to be highly competitive in obtaining both advertising and circulation revenue. With the gaining popularity of commercial television, which began in Israel in November 1993, the company assumes it will experience some reduction in revenue from newspaper advertising but, at this time, the company cannot predict the extent of the reduction.

The company's music and book publishing division, Hed Arzi, experienced an operating profit of NIS 2.0 million (approximately U.S. $0.66 million) for the three months ended September 30, 1994 compared to a profit of NIS 2.7 million (approximately U.S. $0.90 million) for the same period last year. This decrease in profit is a result of the company's decision to expand the business, increasing costs and expenses and sales commissions. This division, in order to expand into the multi-media business, began cooperating with other companies in the

distribution and marketing of these products. In November, 1994 Hed Arzi began marketing its music products in six of the "Shekem" department stores, an Israeli chain with approximately 30 locations countrywide.

The company's outdoor billboard advertising subsidiary had revenues of NIS 1.7 million (approximately U.S. $0.56 million) for the three months ended September 30, 1994 compared with NIS 2.0 million (approximately U.S. $0.66 million) for the same period last year. This division had an operating loss for the quarter ended September 30, 1994 of NIS 0.6 million (approximately U.S. $0.20 million) compared to an operating profit of NIS 0.04 million (approximately U.S. $0.01 million) for the same quarter last year, due mainly to a decrease in revenue from a decline in advertising during the holiday season.

Revenues from the company's insurance subsidiary, I.L.D. Insurance, increased 25 percent to NIS 34.1 million (approximately U.S. $11.3 million) for the three months ended September 30, 1994 compared to NIS 27.2 million (approximately U.S. $9.03 million) for the same quarter last year. However, the division experienced an operating loss of NIS 2.1 million (approximately U.S. $0.70 million) in the third quarter ended September 30, 1994 compared with an operating profit of NIS 0.5 million (approximately U.S. $0.17 million) for the same period last year. This decline in profit continues to be the result of acquiring new life insurance business which, by its nature, has higher acquisition costs under Israeli GAAP (than U.S. GAAP) and premiums which are paid to the company over time. Therefore, profits will be realized only in the later years of these policies. Also, the company experienced a decrease in its general insurance business due to competition and experienced an increase in claims since the first of the year resulting from increased car thefts. The company is continuing its strategy to hire additional agents and expand into additional lines of insurance, especially in the areas of export and credit insurance. This requires obtaining additional licenses from the insurance commissioner which the company is presently pursuing. With the recent arrival of a company

providing "direct insurance" to the public, without the necessity of an insurance agent, the company is anticipating that changes might occur in the marketing of insurance in Israel.

Revenues from the company's hotel subsidiary, ILD Hotels, were NIS 17.7. million (approximately U.S. $5.9 million) for the quarter ended September 30, 1994 compared with NIS 19.6 million (approximately U.S. $6.5 million) for the same period last year. Operating profit was NIS 1.3 million (approximately U.S. $0.43 million) for the three months ended September 30, 1994 compared with NIS 2.7 million (approximately U.S. $0.90 million) for the same quarter last year. This decrease was due to a decline in occupancy due to competition and a decrease in the price of rooms at the company's Neptune Hotel in Eilat. The company continues to compete with very attractive tour packages to overseas destinations, especially Turkey, and is, therefore, providing very attractive promotional "bargain rates" to Israelis to entice them to stay at the company's hotel in Eilat.

Revenues from the company's emergency medical care division, NATALI, were NIS 2.3 million (approximately U.S. $0.76 million) for the three months ended September 30, 1994 compared with NIS 1.5 million (approximately U.S. $0.5 million) for the same period last year. As previously reported, acquiring new accounts involves fixed expenses which are high in relation to total expenses, and payment for membership in NATALI is paid to the company in installments over the subscription period. As of September 30, 1994 expected future revenue amounted to NIS 11 million. NATALI experienced an operating loss of NIS 3.1 million (approximately U.S. $ 1.03 million) for the three months ended September 30, 1994 compared with a loss of NIS 2.6 million (approximately US $ 0.86 million) for the same period last year. This increased operating loss is a result of acquiring new business, as explained above, and a result of an increase in costs and expenses due to agents' commissions and salary increases to doctors and paramedics which had to be given in order to be competitive with an unexpected salary increase given at government-owned hospitals. This

unforeseen expense postpones NATALI's target date for profitability from the beginning of 1995 to the end of 1995. During the last nine months, the company purchased two additional ambulances, bringing its total to six. There are now five dispatch stations operating around the country. NATALI is continuing to develop new services and products in emergency care for heart and asthma patients.

THE ISRAEL LAND DEVELOPMENT COMPANY, LTD. (ILDC), founded in 1909, maintains a diversified portfolio of business enterprises including the publishing of a major Israeli newspaper, other forms of commercial media, insurance, real estate development, hotels and income properties.

- Tables Follow -

THE ISRAEL LAND DEVELOPMENT COMPANY LTD.
STATEMENT OF OPERATIONS
UNAUDITED

U.S. Dollars in thousands, except share and per share data

	Nine Months Ended		Three Months Ended		Year Ended
	9/30/94	9/30/93	9/30/94	9/30/93	12/31/93
Revenues	174,715	157,097	50,795	57,470	219,167
Expenses	167,438	145,885	52,776	52,535	198,805
Income Before Taxes	7,277	11,212	(1,984)	4,935	20,362
Income Taxes	2,591	4,392	109	2,309	7,084
Company's Share in Gains (Losses) of Subsidiaries and Affiliated Companies, Net	469	214	219	35	(279)
Minority Interest in Losses of Consolidated Subsidiaries	638	(866)	389	(350)	(1,233)
Net Income	5,792	6,169	(1,482)	2,311	11,766
Net Income Per Share	0.19	0.20	(0.05)	0.07	0.38
Shares Outstanding	28,268,823	26,574,702	28,268,263	26,574,702	27,917,779

*All U.S. $ figures represent convenience translations using an exchange rate of 3.013 New Israeli Shekels (NIS) to U.S. $1.00 as of September 30, 1994

NEWS RELEASE

RUDER·FINN

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FOR IMMEDIATE RELEASE

ILDC TO BRING MOTEL CONCEPT TO ISRAEL

Tel Aviv, Israel, December 15, 1994 -- The Israel Land Development Company, Ltd. ("ILDC") (NASDAQ:ILDCY) today announced that it has entered into an agreement with an experienced Israeli developer to construct and test market what will be the first motel chain in Israel.

Ron Weissberg, ILDC chief financial officer, said that the move is a natural extension of the company's hotel subsidiary, ILD Hotels, which currently owns and operates four luxury hotels in Israel. "We are currently in discussions with a well-known international chain with the idea of franchising their name in Israel," said Weissberg. "We will test the motel concept at a few locations, here, to determine the attractiveness of motel accommodations among tourists and vacationing Israelis. Should the test market prove successful, our plans call for a nationwide chain that could reach 1,000 rooms," he added.

ILDC, founded in 1909, maintains a diversified portfolio of businesses enterprises, including the publishing of a major Israeli (daily) newspaper, other forms of commercial media, insurance, real estate development, hotels and income properties.

30

BW 3/13 ILDC DECLARES DIVIDEND

Business Editors

TEL AVIV, Israel--(BUSINESS WIRE)--March 13, 1995--The Israel Land Development Co. Ltd. (ILDC) (NASDAQ:ILDCY) today announced that its Board of Directors has approved a one-time dividend payment to its shareholders. The payment will be calculated at a rate of NIS 0.106 (U.S. $.1073(a)) per ordinary share. Each American Depository Receipt represents three ordinary shares of the company. This is the first time since its initial public offering in the United States in December 1990 that the company has declared a dividend. The dividend will be paid to shareholders of record as of the close of trading on March 21, 1995 and will be distributed on April 11, 1995.

Ron Weissberg, Chief Financial Officer of ILDC, said that the time has come for its shareholders to enjoy a bonus. Although three of the company's six businesses are still in developmental stages, the decision to declare a dividend is an indication of the maturity of the company's other lines of business. Weissberg further explained that two of its public subsidiaries, ILD Hotels and Hed Arzi, have made dividend payments to their shareholders and that such payments are a natural extension of growth.

ILDC, founded in 1909, maintains a diversified portfolio of business enterprises, including the publishing of a major Israeli daily newspaper, other forms of commercial media, insurance, real estate development, hotels and income properties.
-0-
(a) Approximate U.S. dollar amount per American Depository Receipt/Share.

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or
Ruder Finn Inc.
Robert Ferris, 212/715-1573
Cynthia DeMonte, 212/593-6321

KEYWORD: NEW YORK

INDUSTRY KEYWORD: PUBLISHING INSURANCE REAL ESTATE DIVIDEND

REPEATS: NEW YORK 212-575-8822 OR 800-221-2462; BOSTON 617-330-5311 OR

-0- (BW) Mar/13/95 10:03
EOS (BW) Mar/13/95 10:03 86

-0- (BW) Mar/13/95 10:18

RUDER FINN INCORPORATED
Schedule of Publications on behalf of
Ranbaxy Laboratories Limited
For Six Month Period Ending March 27, 1995

Description of Publication	By Whom Written, Edited or Prepared	By Whom Printed, Produced or Published	By Whom Distributed
1. Half-Year Results 10/18/94	Ranbaxy/ Ruder Finn	Ruder Finn	Ruder Finn
2. Eli Lilly and Ranbaxy Announce Alliance 1/25/95	Ranbaxy/ Ruder Finn	Ruder Finn	Ruder Finn
3. Ranbaxy Approves Interim Dividend 2/21/95	Ranbaxy/ Ruder Finn	Ruder Finn	Ruder Finn

Describe fully all activities of Registrant during the period for or in the interest of each foreign principal.

During the six months, Ruder Finn was engaged in the following activities on behalf of Ranbaxy Laboratories Limited:

1. Prepared and distributed half-year earnings results release.

2. Prepared and distributed Eli Lilly and Ranbaxy Alliance release.

3. Prepared and maintained company mailing and fax lists.

BW 1/25 ELI LILLY AND RANBAXY LABORATORIES

IN $90 MILLION GLOBAL ALLIANCE

BUSINESS EDITORS

NEW DELHI, INDIA--(BUSINESS WIRE)--JANUARY 24, 1995--ELI LILLY AND COMPANY, USA AND RANBAXY LABORATORIES LIMITED, (GDR:RBXYG) INDIA, TODAY ANNOUNCED THEIR STRATEGIC BUSINESS PLANS FOR A GLOBAL ALLIANCE.

AT THE OUTSET, THE GLOBAL ALLIANCE INVOLVES INVESTMENTS OF AROUND US$90 MILLION TO SET UP TWO JOINT VENTURES WITH EQUAL PARTICIPATION; ONE EACH IN THE US AND INDIA. THE JOINT VENTURE IN INDIA (RDMJV) WILL INVEST A SUM OF AROUND US$60 MILLION OVER THE NEXT THREE YEARS IN RESEARCH, DEVELOPMENT AND MANUFACTURING. THE PRODUCTS WILL COMPRISE OFF-PATENT DRUGS, EXTENSIONS OF CURRENT LILLY AND RANBAXY PRODUCTS, NEW PRODUCTS OF BOTH COMPANIES AND OTHER SPECIALTIES. THIS INVESTMENT ALSO PROVIDES FOR THE REGULATORY COSTS OF RDMJV PRODUCTS. THE JOINT VENTURE IN THE US (MJV), WITH AN INVESTMENT OF APPROXIMATELY US$30 MILLION, WILL FOCUS ON MARKETING PRODUCTS FROM THE RDMJV AS WELL AS SELECT LILLY AND RANBAXY PRODUCTS.

"LILLY WILL HAVE ACCESS TO HIGH-QUALITY, LOW COST PRODUCTS WHICH HELP IN DISEASE MANAGEMENT PROGRAMS IN THE US, AND WE WOULD ALSO GAIN ACCESS TO EXCELLENT PRODUCT DEVELOPMENT CAPABILITIES AS WELL AS RESEARCH AND DEVELOPMENT," SAID SIDNEY A. TAUREL, EXECUTIVE VICE PRESIDENT OF LILLY AND PRESIDENT OF THE PHARMACEUTICAL DIVISION.

MR. D.S. BRAR, PRESIDENT PHARMACEUTICALS, RANBAXY LABORATORIES LIMITED, SAID "THIS ALLIANCE IS A CEMENTING OF OUR RELATIONSHIP WITH LILLY. THIS WILL NOT ONLY SPEARHEAD RANBAXY'S ENTRY INTO THE US MARKET BUT WILL ALSO PROVIDE A SIGNIFICANT IMPETUS TOWARDS EXPANDING OUR INTERNATIONAL OPERATIONS."

ELI LILLY AND COMPANY IS A GLOBAL, RESEARCH-BASED PHARMACEUTICAL CORPORATION HEADQUARTERED IN INDIANAPOLIS, INDIANA, THAT IS WORKING WITH ITS CUSTOMERS WORLD-WIDE TO HELP ENSURE THAT DISEASES ARE PREVENTED, MANAGED AND CURED WITH MAXIMUM BENEFIT AND MINIMUM COSTS TO PATIENTS AND SOCIETY.

RANBAXY LABORATORIES LIMITED, HEADQUARTERED AT NEW DELHI, IS THE LARGEST PHARMACEUTICAL COMPANY IN INDIA WITH THE SECOND HIGHEST SHARE IN THE DOMESTIC RETAIL MARKET AND A RAPIDLY EXPANDING INTERNATIONAL PRESENCE. RANBAXY IS A MAJOR PRODUCER OF MULTISOURCE ANTIBIOTICS, NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS), ANALGESICS AND ANTI-ULCERANT/GASTROINTESTINALDRUGS.

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CONTACT FOR: RANBAXY LABORATORIES LIMITED
V.K. KAUL
VICE PRESIDENT, FINANCE
011-9111-643-7259
OR
DILIP RANGNEKAR
MANAGER, EXTERNAL COMMUNICATIONS
011-9111-643-7078
OR
ROBERT D. FERRIS
RUDER FINN, INC.
NEW YORK, NY 10022
212-715-1573

REPEATS: NEW YORK 212-575-8822 OR 800-221-2462; BOSTON 617-330-5311 OR

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BW 2/10 RANBAXY LABORATORIES APPROVES INTERIM DIVIDEND

Business Editors

NEW DELHI, India--(BUSINESS WIRE)--Feb. 10, 1995--At a meeting of the board of directors of Ranbaxy Laboratories Limited (GDR:RBXYG), the board approved payment of an interim dividend (at) 20% on equity shares (Rs. 2 per share) (1993-94 - 15%/Rs. 1.50 per share) pro rata on increased equity capital of Rs. 431.32 million (U.S. approximately $13.7 million) (1993-94 - Rs. 353.30 million)/U.S. approximately $11.3 million) on the basis of unaudited results for nine months ended Dec. 31, 1994.

The outgo at Rs. 79.92 million (U.S. approximately $2.5 million) for the interim dividend went up by 60% (1993-94 - Rs. 49.85 million/ U.S. approximately $1.6 million). The board fixed Friday, March 24, 1995, as the record date for the purpose.

For the nine months ended Dec. 31, 1994, Ranbaxy recorded sales of Rs. 5089 million (U.S. approximately $162.2 million) (1993-94 - Rs. 4048 million/U.S. approximately $129.0 million), an increase of 26%. Export sales were Rs. 2120 million (U.S. approximately $67.6 million) (1993-94 - Rs. 1352 million/U.S. approximately $43.1 million), an increase of 57%, and export sales accounted for 42% of total sales during the period (1993-94 - 33%).

Ranbaxy achieved gross profit of Rs. 962 million (U.S. approximately $30.7 million) (1993-94 - Rs. 491 million/U.S. approximately $15.7 million), an increase of 96%. After absorbing Rs. 131 million (U.S. approximately $4.2 million) for depreciation (1993-94 - Rs. 104 million/U.S. approximately $3.3 million), profit before tax amounted to Rs. 831 million (U.S. approximately $26.5 million) (1993-94 - Rs. 387 million/U.S. approximately $12.3 million), an increase of 115%. Provision for taxation being Rs. 100 million (U.S. approximately $0.3 million), net profit at Rs. 731 million (U.S. approximately $23.3 million) (1993-94 Rs. 377 million/U.S. approximately $12.0 million) recorded an increase of 94%.

Barring unforeseen circumstances, Ranbaxy expects to increase the rate of total dividend for the current year (1993-94 - 40% / Rs. 4 per share).

Ranbaxy Laboratories Limited, headquartered in New Delhi, is the largest Indian pharmaceutical company, and the country's second leading pharmaceutical supplier to the domestic market. Ranbaxy is a major producer of multisource antibiotics, nonsteroidal anti-inflammatory drugs (NSAIDs), analgesics and anti-ulcerant/

gastrointestinal drugs.
-0-

Exchange Rate Feb. 9, 1995 Rs. 31.37/U.S. $1.

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CONTACT: Ranbaxy Laboratories Ltd.
V.K. Kaul (VP, Finance)
011-9111-643-7259
Dilip Rangnekar (Manager, External Communications),
011-9111-643-7078
or
Ruder Finn Inc.
Robert D. Ferris, 212/715-1573

KEYWORD: NEW YORK

INDUSTRY KEYWORD: PHARMACEUTICAL DIVIDEND
REPEATS: NEW YORK 212-575-8822 OR 800-221-2462; BOSTON 617-330-5311 OR

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NEWS RELEASE

RUDER·FINN

FOR IMMEDIATE RELEASE

COMPANY CONTACT: V. K. Kaul
Vice President, Finance

V. K. Topa
Director, Corporate Affairs
and Allied Businesses
Ranbaxy Laboratories Ltd.
New Delhi, India
(9111) 641-5522

U.S. CONTACT: Robert D. Ferris
Ruder Finn, Inc.
New York, NY U.S.A.
(212) 715-1573

RANBAXY REGISTERS 120% INCREASE IN PROFIT BEFORE TAX

New Delhi, India -- October 18, 1994 -- At their meeting held here today, the Board of Directors of Ranbaxy Laboratories Limited (GDR: RBXYG) approved the half-year unaudited results for the period ended April-September, 1994. Sales income at Rs.3426 million (U.S.$109.2 million) has registered a 22 percent growth over the prior year's comparable period, while profit before tax at Rs.553 million (U.S.$17.6 million) has increased significantly by 120 percent and profit after tax at Rs.495 million (U.S.$15.8 million) has recorded an impressive 97 percent increase.

International operations have grown by 48 percent, with the Europe, CIS and Africa Group and the Asia/Pacific Group showing growth rates of 115 percent and 37 percent, respectively. Allied businesses have seen a healthy 47 percent increase.

This impressive growth in sales and profits has been on account of the substantial increase in exports and higher value addition to product mix. Lower cost of production due to

upgradation of technology, lower interest costs and higher capacity utilization are some of the other factors contributing to the profit component.

Ranbaxy's initiatives towards internationalization have continued to yield good results. The thrust has been on markets of Russia, Ukraine and China. The manufacturing facility of the Company's joint venture in China, viz. Ranbaxy Guangzhou China Limited, is expected to be commissioned by the end of this year. The formulation plant in Malaysia has been expanded and upgraded. Representative offices in Warsaw and a corporate presence in South Africa will further consolidate the Company's presence in Europe and the African continent.

The process of internalization is built on the twin pillars of "World-class Manufacturing" that the Company has established and it's capabilities in "Applied Research." Accordingly, the internalization effort is spearheaded by strategic alliances for entry into developed countries and setting up joint ventures and subsidiaries in emerging markets, while maintaining a continued thrust on exports world-wide.

Ranbaxy's fermentation pilot plant in Himachal Pradesh has been successfully commissioned. This plant is intended, initially, for the manufacture of pilot batches of Cephalosporin-C. This will soon be upscaled to commercial scale for the manufacture of a range of oral and injectible Cephalosporins -- broad spectrum antibiotics.

Ranbaxy continues its concerted thrust on Research & Development. The company is presently considering collaborative research projects with a few international companies. The company has developed the capability of manufacturing effervescent dosage forms. This delivery system offers the advantage of solid state stability and liquid state bio-availability. It also facilitates patient compliance.

Ranbaxy Laboratories Limited, headquartered in New Delhi, is the largest Indian pharmaceutical company, and the country's second leading pharmaceutical supplier to the domestic market. Ranbaxy is a major producer of multisource antibiotics, nonsteroidal anti-inflammatory drugs (NSAIDs), analgesics and anti-ulcerant/gastrointestinal drugs.

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RANBAXY

LABORATORIES LIMITED

Unaudited Financial Results (Provisional)
for the half year ended 30th September, 1994

(US$ Million)

	Six Months Ended 30.9.94	Six Months Ended 30.9.93	Percentage Change	Year Ended 31.3.94
Sales	$109.2	$89.4	22	$189.2
Exports	42.1	28.4	48	70.9
Domestic	67.1	61.0	10	118.3
Total Expenditure	88.7	75.1		156.5
Profit before Interest & Depreciation	20.5	14.3	43	32.7
Interest	0.2	4.1		7.3
Profit before Depreciation	20.3	10.2	99	25.4
Depreciation	2.7	2.2		4.6
Profit before Tax	17.6	8.0	120	20.8
Tax	1.8	–	–	0.6
Profit after tax	15.8	8.0	98	20.2
Equity Share Capital	12.7	10.4		11.0
Reserves excluding revaluation reserves (as per balance sheet of previous accounting year)				52.8

Increase in Equity Share Capital of US$ 1.64 Million is due to issue of Global Depositary Shares on 7th July 1994

Conversion Rates taken at Rs. 31.37 per U.S. $

Regd. Office: Sahibzada Ajit Singh Nagar – 16055, Distt. Ropar (Punjab)

RANBAXY
LABORATORIES LIMITED

Unaudited Financial Results
for the half year ended 30th September, 1994

(Indian Rs. Lacs)

	Six Months Ended 30.9.94	Six Months Ended 30.9.93	Percentage Change	Year Ended 31.3.94
Sales	34,256	28,062	22	59,343
Exports	13,209	8,917	48	22,247
Domestic	21,047	19,145	10	37,096
Total Expenditure	27,834	23,583		49,089
Profit before Interest & Depreciation	6,422	4,479	43	10,254
Interest	54	1,273		2,289
Profit before Depreciation	6,368	3,206	99	7,965
Depreciation	840	692		1,427
Profit before Tax	5,528	2,514	120	6,538
Tax	580	–	–	190
Profit after Tax	4,948	2,514	97	6,348
Equity Share Capital	3,988	3,269		3,466
Reserves excluding revaluation reserves (as per balance sheet of previous accounting year)				16,575

Increase in Equity Share Capital of Rs. 516 lacs is due to issue of Global Depositary Shares on 7th July 1994

Question # 11
Schedule #
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RUDER·FINN, INC.
Schedule of Publications on Behalf of
Sandoz Pharma Ltd.
For Six Month Period Ending March 27, 1995

Description of Publications	By Whom Written, Edited or Prepared	By Whom Printed, Produced or Published	By Whom Distributed
None			

Describe fully all activities of Registrant during the period for or in the interest of each foreign principal.

During the six months, Ruder Finn Incorporated was engaged in the following activities on behalf of Sandoz Pharma Ltd.:

1. General public relations counseling.