

The pieces on this record represent two different approaches to the use of electronic sounds with instruments. "Reconnaissance" utilizes two live electronic instruments in conjunction with four conventional instruments. A couple of years ago it occurred to me (and to many other composers) that the new instruments with their extreme versatility and portability could be used on stage rather than being committed to tape. Live musicians add a drama to music that a tape recorder simply cannot duplicate; the electronic instruments are extremely dramatic on stage and add a visual dimension to the music. Electronic sounds manipulated in this manner stay flexible in relation to the other instruments in a manner that tape obviously cannot. This allows a real give-and-take quality (which is one of the attractions of chamber music). The biggest drawback of live electronic music is that the electronic instruments are limited (temporarily, at least) to fewer possibilities than when the music is com-

"Reconnaissance," which uses two Moog instruments performed "live," exists in two versions. The first was completed in 1967 for the Music In Our Time concert series in New York and was subsequently performed at Expo '67 and at the Monday Evening Concerts in Los Angeles. The version on this record has undergone extensive revision and is now almost 7 minutes longer than the original.

The Moog Synthesizer, one of the electronic instruments employed in the piece, is becoming familiar to musicians everywhere. The other instrument is essentially much simpler. It is a keyboard instrument with a range of four octaves, each octave divided into forty-three divisions instead of the usual twelve. It can also produce chords in a live performance situation, which, except for chords always in the same ratio, is impossible for the synthesizer. I simply wrote a piece for six instruments and regarded the electronic ones as equal partners, no more, no less. To me the electronic instruments in conjunction with our traditional ones are capable of producing a chamber music that is rich in new possibilities.

"In No Strange Land" was written for electronic sounds and two very specific and versatile performers. Bertram Turetzky is a friend of many years' standing and one whose work I admire as much as I value his friendship. I have written several pieces for him and we have collaborated on many previous occasions. Stuart Dempster is also a friend whose work I (as a former brass player) find verging on the incredible.

A year or so ago, with a Nonesuch Records commission to spur us on, the three of us began dis-

nonesuch

cussing a work for the two performers plus tape. After a good deal of three-way communication and experimentation, the piece was completed in September, 1968. The tape segments were realized in Trumansburg, New York, at the electronic studio of the R. A. Moog Company; then, the three of us met in La Jolla, California, where the instrumental tracks were added.

The one subject I haven't as yet touched upon concerns my approach to composing. To me composing is basically an intuitive process. A composer should be able to use what he knows about music in an instinctive manner rather than relying on "systems." Neither am I interested in abdicating my responsibility as a composer to factors over which I have little or no control. The materials in these pieces are products of my own musical instinct and I take full responsibility for the manner in which they are introduced and utilized.

The titles themselves have no programmatic intent nor do they have any direct reference to the musical material. "Reconnaissance" simply gives some clue as to the rather exploratory nature of the piece.

"In No Strange Land," taken from the title of a poem by Francis Thompson, reveals something about my feelings toward electronic music. Electronic music, which the public is apt to regard with awe, is not something esoteric. It is a new vocabulary of sound for the composer. It is not a revolutionary new world designed solely for the initiate but offers a new musical vocabulary for anyone who likes music. It will not turn a technician into a composer nor will it make a good composer out of a mediocre one. It is a new tool for the composer, a rich new source added to an already rich body of sound.

—DONALD ERB



### DONALD ERB (b.1927) MUSIC FOR INSTRUMENTS & ELECTRONIC SOUNDS

Side One (17:12) RECONNAISSANCE a composition in 5 movements (3:17: 2:10: 1:42: 6:43: 2:52) for violin, double-bass, piano, percussion, Moog Synthesizer, and Moog polyphonic instrument Bonnie Douglas, violin Rand Forbes, double-bass Ralph Grierson, piano Kenneth Watson, percussion Michael Tilson Thomas, Moog synthesizer Leonard Stein, Moog polyphonic instrument Donald Erb, conductor Recorded at Elektra Sound Recorders, Los Angeles John Haeny, recording engineer Paul Beaver, technical assistant Bernard L. Krause, producer

Side Two (17:00)

IN NO STRANGE LAND
a composition in 4 movements
(5:00; 4:48; 3:14; 3:37)
for trombone, double-bass,
and electronic sounds
Stuart Dempster, trombone
Bertram Turetzky, double-bass
James Campbell, recording engineer
(University of California at San Diego)
Electronic sounds realized at the
studio of the R. A. Moog Company,
Trumansburg, New York
(Reynold Weidenaar, William Hemsath
Rudolph Bubalo, technical assistants)

Donald Erb was born in Youngstown, Ohio. After spending his early years in music as a jazz trumpeter and arranger, he subsequently received a music degree from Kent State University, where he majored in trumpet and also studied composition with Harold Miles and Kenneth Gaburo. He holds degrees from The Cleveland Institute of Music and Indiana University, where he studied with Marcel Dick and Bernhard Heiden, respectively. His orchestral music has been performed by the Seattle, Cleveland, Dallas, Atlanta, Detroit, Indianapolis, and Australian Broadcasting Company orchestras. 1968-69 performances include the Nashville, Oregon, Dallas, Atlanta, Minneapolis Civic, and Philadelphia orchestras. Mr. Erb has held grants from the Ford and Guggenheim Foundations and from the National Council on the Arts. For the 1968-69 season—while on leave from the Cleveland Institute of Music, where he has been a member of the faculty for the past three years—he is composerin-residence with the Dallas Symphony Orchestra under a grant from the Rockefeller Foundation.

Turetzky received his musical education at Hartt College of Music (Hartford), where he earned BM and MM degrees, and at New York University's Graduate School, where he studied musicology as well as music. As a virtuoso double-bass player, he has appeared as soloist at leading universities, concert halls, and music festivals throughout the United States and Canada. Over one hundred compositions have been written for him during the last decade. Mr. Turetzky has published numerous editions of musical compositions and has made frequent lecture appearances. He has been on the faculty of Hartt College of Music, University of Hartford, since 1953 and is presently an Assistant Professor at the University of California, San Diego. Writing in "High Fidelity," Alfred Frankenstein commented. "Whenever there is a part for the string

Born in 1933 in Norwich, Connecticut, Bertram

Associate under Lukas Foss at the University of Buffalo. Stuart Dempster's outstanding virtuosity on his instrument, coupled with his creative involvement in the compositional process, led him to embark upon a continuing commission program that has resulted in a number of important new works for trombone. A recital in March 1966 at the San Francisco Tape Music Center, in which Dempster introduced new works by Berio, Erickson, and Oliveros, was followed by an eight-month performing and lecture tour of the United States, Canada, and Europe. Mr. Dempster has taught at the San Francisco Conservatory of Music and California bass in a modern music concert, you may be sure State College, and in the Fall of 1968 joined the that Bertram Turetzky will play it. He is a great virtuoso with a particularly fine sense of contemteaching faculty of the University of Washington at Seattle. porary styles."

Trombonist Stuart Demoster was born in Berkeley.

California, in 1936. He received his MA in com-

position in 1967 from San Francisco State College,

was principal trombone with the Oakland Sym-

phony 1962-1966, and has been a member of the

Performing Group at Mills College and a Creative



# Donald Erb

Symphony of Overtures
The Seventh Trumpet
Concerto for Solo Percussionist

Dallas Symphony Orchestra Donald Johanos, Conductor

Marvin Dahlgren, Percussion Donald Erb was born in Youngstown, Ohio, in 1927. After spending his early years as a jazz trumpeter and arranger he received a music degree from Kent State University and subsequent degrees from the Cleveland Institute of Music and Indiana University. His orchestral music has been widely performed in recent years by an impressive array of orchestras including those of Seattle, Atlanta, Cleveland, Philadelphia, Dallas, Pitts-

burgh, New Jersey, Minnesota, Indianapolis and Boston.
Mr. Erb has held grants from the Ford, Guggenheim and Rockefeller foundations, as well as the National Council on the Arts. In 1968-69 he was Composer-in-Residence with the Dallas Symphony Orchestra, after which he returned to the position of Composer-in-Residence at the

Cleveland Institute of Music in Cleveland, Ohio.

#### SYMPHONY OF OVERTURES

(Endgame

The Blacks The Maids Rhinoceros)

This work was finished at Indiana University in February, 1964. The first performance was by the University Orchestra almost a year later. with Tibor Kozma directing. Shortly thereafter it was played at a Contemporary Festival concert sponsored by the Scattle Symphony Orchestra, with Milton Katims conducting; and in November of 1965, the Cleveland Orchestra, under Louis Lane, presented the work in Cleveland. There have been many subsequent performances with major orchestras.

The score, which has been dedicated to the composer's wife, has

been provided with the following notes by Mr. Erb.

'The plays that have been used as a basis for the Symphony of Overtures are The Blacks by Jean Genet, Endgame, by Samuel Beckett, The Maids by Jean Genet, and Rhinoceros by Eugene Ionesco. It has been asked how such a piece can be called a symphony. The answer is simply that, although each movement is an overture, the four movements combine into a rather conventional symphonic pattern. The first movement opens slowly, then develops into an allegro. The second movement is a conventionally placed adagio. The third resembles a scherzo and trio, and the last, a brutal march-like movement, provides a noisy climax.

"The form of each movement is, in a very general way, dictated by

the dramatic structure of the play upon which it is based. There has been no conscious attempt to use any of the conventional musical forms, although a resemblance is apparent in the third movement. In essence, the work marks a return to the long dishonored ways of 'program music'; yet

it can also be heard on purely musical terms.

'The motives and textures which begin each overture are almost immediately treated in a developmental fashion. The divisions of each movement into sections are created more by changes in texture than by other more traditional means, such as cadences or changes in tonal areas, Texture, then, is of primary importance and is used as a basic organizing

factor, rather than as an effect.
"As in most pieces, motives are stated and developed, but these are rarely employed as full-blown melodies. Long melodic lines occur only a few times in the entire work. This fragmentary treatment, certainly not unusual, seemed appropriate to these plays since they frequently employ

dialogue in much the same manner.
"The Blacks explores, in a very penetrating way relations between the negro and white races. There is a tense undertone throughout the play. This comes to the surface in a very explosive manner near the end. In musical terms, this gave the opportunity to create a sense of underlying ugliness and to create an apex to the movement which could capture to some

degree the chaos which finally explodes on stage.
"The movement opens with a sinister murmur stated by the bass clarinet, bassoon (with a paper cone extension to obtain a tone below the usual range), contrabassoon, bass trombone, tuba, harp, and string bass. This is followed by a motive divided between the violins and flutes. The texture grows heavier and more intense, and the motive more agitated throughout the movement until it culminates in a twenty second cadenza. All the players of the orchestra, with the exception of the strings and a few woodwind instruments, improvise a cadenza on assigned motives. The total effect is one of frenzy which could not have been achieved through a stricter notation. The end of the cadenza is signalled by the conductor. The section from here to the end is a short coda containing fragments from all parts of the movement.

"The plays of Samuel Beckett do not lend themselves to a literal interpretation. Endgame is no exception. It is a moody play written with an exquisite sense of rhythm and language, and concerned with loneliness and lack of communication. The dialogue is low-keyed and the characters are without hope. They wait for things which will never happen, and wish

for things which cannot be.

The movement, an adagio, begins with a melody divided between the harp and chimes. Accompanying this as a basic texture made of nervous rhythms played on the claves and temple blocks. As in the preceding movement, a characteristic feature of this overture is a combination of motive and texture. Added to this is the factor of silence which creates tension and an urgent sense of waiting for something to happen, a feeling which penetrates the play from the beginning to end.

"The central characters in The Maids (again by Genet) are two servants, sisters whose secret desires and emotions are revealed through a game of play-acting. Motivated by jealousy, they act out the murder of their mistress (Madame) until the game becomes terrifyingly serious and the play-acting suddenly ends. The play revolves around a curious mixture of farce and horror as it develops from flagrant make believe to its tragic

"This movement is the only one of the four in which the form of the music intentionally parallels the form of the play. The first section depicts the maids playing their deadly game. The second, the arrival of 'Madame', and the last section, the return of the maids to their game and the subsequent death of Claire, one of the sisters. This movement also comes closer than any of the others to having a 'conventional' musical form. It occupies the same place in the order of symphonic movements as a scherzo and trio, a form which it resembles.

"The combination of textural and motivic development in this

movement is so designed as to give it nightmarish atmosphere.

'Rhinoceros has the most obvious meaning of all the plays for which this symphony provides overtures. It is an attack on conformity and a protest against totalitarianism. This group, however, is not consistent from the beginning but keeps growing larger as the movement progresses. The march beat, which is quiet and somewhat sporadic at first, becomes gradually louder and more obvious until, by the end, it is heavy and brutal. "The sharp chord with which the movement opens, the sul

ponticello sound ('on the bridge'), the rhythmic pattern, the march beat in the percussion, and the disjunct melody all play a role in the musical development of this movement. Much of the time they alternate with each other; but as the movement progresses, they tend to overlap and eventually, at the end of the movement, they all sound simultaneously."

#### THE SEVENTH TRUMPET

(THE SEVENTH TRUMPET was one of the very few works by American composers to be chosen for UNESCO'S International Rostrum Composers for 1971.)

"The Seventh Trumpet" was completed on February 7, 1969 and is dedicated to Donald Johanos, the former Music Director of the Dallas Symphony Orchestra. The title alludes to a section of the Book of Revelations. The composer prefers, however, not to make any specific. comparisons between this section of the Bible and what occurs in the music. The pertinent quotations follow:

Revelations:

8:2 And I saw the seven angels which stood before God: and to them were given seven trumpets.

8:7 The first angel sounded, and there followed hail and fire mingled with blood, and they were cast upon the earth: and the third part of trees was burnt up, and all green grass was burnt up.

8:8 And the second angel sounded, and as it were a great mountain burning with fireswas cast into the sea: and the third part of the sea became blood. 8:10 And the third angel sounded, and there fell a great star from heaven, burning as it were a lamp, and it fell upon the third part of the rivers, and upon the fountains of waters;

8:11 And the name of the star is called wormwood: and the third part of the waters became wormwood; and many men died of the waters, because they were made bitter.

8:12 And the fourth angel sounded, and the third part of the sun was smitten, and the third part of the moon, and the third part of the stars; so as the third part of them was darkened, and the day shone not for a third part of it, and the night likewise.

9:1 And the fifth angel sounded, and I saw a star fall from the heaven unto the earth: and to him was given the key of the bottomless pit.

9:2 And he opened the bottomless pit; and there arose a smoke out of the pit, as the smoke of a great furnace; and the sun and the air were darkened by reason of the smoke of the pit.

9:3 And there came out of the smoke locusts upon the earth; and unto them was given power, as the scorpions of the earth have power. 9:6 And in those days shall men seek death, and shall not find it: and shall desire to die, and death shall flee from them.

9:13 And the sixth angel sounded, and I heard a voice from the four horns

of the golden altar which is before God,

9:14 Saying to the sixth angel which had the trumpet, Loose the four angels which are bound in the great river Euphrates.

9:20 And the rest of the men which were not killed by these plagues yet 

their fornications, nor of their thefts.

11:15 And the seventh angel sounded; and there were great voices in heaven saying, The kingdoms of this world are become the kingdoms of our Lord, and of his Christ; and he shall reign for ever and ever. Mr. Erb's analysis of "The Seventh Trumpet" is as follows:

"The composition is in one movement divided into three large sections. The first section opens with a quite free cadenza for flute, clarinet, bass clarinet and string bass. The material presented in this cadenza is present in various guises throughout the piece. The first section has a static quality The strings enter stand by stand and proceed to hold the note they land on for the rest of the section. Other musical figures are superimposed on

this relatively inactive mass.
"The second section is very rhythmic and consists of most of the players in the orchestra performing on their instruments in unusual ways. The last section begins slowly and gradually speeds up. It is basically

cumulative in nature.

#### CONCERTO FOR PERCUSSION AND ORCHESTRA

This work had its initial performance with the Detroit Symphony Orchestra under the direction of Sixten Ehrling, December 29,1966. The work was completed in August of the same year. At the time of its premiere, the

composer supplied the following notes:
"The work is cast in the traditional concerto format of three movements. The solo part is in the eighteenth and nineteenth century virtuoso tradition. The cadenzas in the second and, especially, the third movements harken back to the eighteenth century tradition of having the performer improvise much or all of the cadenza. A variation on this idea was used in the first movement, where instead of having the soloist improvise a cadenza

I had the entire orchestra, other than the soloist, improvise it.

"The orchestra does function in this piece in much more than its traditional role of accompaniment. The individual orchestra parts are, in

places, virtuoso passages in their own right.
"Music today is undergoing drastic changes. Many of the time-honored concepts of music are being cast aside. The composer of a generation or two ago would have included such items as melody, harmony and counterpoint as being essential ingredients in the structure of any good piece of music. Many composers today feel that this is not so. Music is, in its broadest sense, sound. Sound is endlessly fascinating in its own right. It does not need the traditional use of melody or harmony to make it interesting. Nothing in the symphony orchestra has as much appeal from the standpoint of pure sound as does the percussion section with its enormous variety of instruments. One percussionist is capable of producing a

"Each movement of the concerto is based not only on certain musical motives but also on certain basic 'sounds' which are used and developed in their own unique ways. For example, the snare drum roll which opens the first movement functions as one of these basic sounds. It is shortly followed by a tremolo in the harp which is an outgrowth of the snare roll. This is followed by a tremolo in the strings and, eventually, by trills in all the wind instruments. Thus, all the instruments in the orchestra produce that sound which is closest to the sound of the snare drum roll.

This roll, trill, tremolo sound appears throughout it

This roll, trill, tremolo sound appears throughout the movement.

"Probably the most basic sound in the second movement is a glissando. It is started in the first measure by the piano, harp, and trombone. Thereafter it can be heard moving from one instrument or section of the orchestra to another. Eventually almost all the instruments are playing continuous glissandi as an accompaniment to the percussion cadenza.

"The third movement uses several different basic sounds. One is a

percussive 'click' as exemplified by the opening passage for harp, piano, and percussion. Another is the flutter tongue sound which occurs soon after in the brass. A third sound is a 'rip' up in the brass which immediately follows the flutter. All of these sounds follow one another in rather rapid succession throughout the movement. An example of the mutation of one of these sounds is found early in the movement. The strings play a passage in which, instead of bowing their instruments, they push their fingers against the fingerboard producing a sound which is an outgrowth of the opening 'click' sound of the piano, harp, and percussion.

"Hoping that this suffices as an example of what I call basic sound,

I should like to finish with a few more words about percussion. Every age has produced its great virtuosi. In past eras, we have had great violinists and piano virtuosi. In our time, a new and, I think, peculiarly American virtuoso, the percussionist, has made an appearance. We live in an age of great percussion players, and it is only fitting that virtuoso pieces should

be written for them.

Notes by DOROTHEA KELLEY

Marvin Dahlgren, principal percussionist of the Minnesota Orchestra has been a member of the Orchestra since 1950. He is also a drummer on the staff of the Minnesota Theater Company, performing regularly in the company's seasons at the Tyrone Guthrie Theater in Minneapolis.

Mr. Dahlgren graduated from the MacPhail College of Music in Minneapolis, earning his B.A. in 1950. He is the author or co-author of twelve books on percussion and owns and operates the Dahlgren Drum Shop in Minneapolis.

#### LESLIE BASSETT

**SEXTET for Piano and Strings (in four movements)** 

Concord String Quartet (Mark Sokol, Andrew Jennings, John Kochanowski, Norman Fischer) with John Graham, viola, and Gilbert Kalish, piano

LESLIE BASSETT (b. Hanford, Cal., 1923) has spent much of his adult musical life at the University of Michigan, where he is chairman of the composition department. Since his VARIATIONS FOR ORCHESTRA (CRI 203) won the Pulitzer Prize in 1966, he has enjoyed a wide and ever-widening reputation as a composer of refinement and originality. He came to composition after a career as trombonist and arranger with army bands during World War II, studying with Ross Lee Finney, Arthur Honegger, Nadia Boulanger, Roberto Gerhard and, for electronic music, Mario Davidovsky. His many compositions have earned him commissions, prizes and honors throughout the nation. He writes:

"The SEXTET came into being as the result of several considerations. Nine years had passed since my last chamber music for strings, the THIRD QUARTET written in Rome, and I wanted to work again with an ensemble capable of high intensity and poignancy. The piano was added for its incisive quality and extended low register and the extra viola to improve the balance between the strings and piano and to add warmth. I strove to make the work structurally clear, to project many moods, and to call upon a rich variety of instrumental colors. The music alternates between clearly metrical passages, which predominate, and unmetered areas in which metrics gradually move out of phase or disappear entirely. Metrical passages, often closely-knit rhythmically, usually place the piano and strings in dialogue. The first two movements are restless and fast, though guite different in mood and content. Both rise to climactic points, then end quietly. The third movement is slow, the fourth assertive and driving. Much of the musical material emerges from three consecutive major thirds on D-flat, D-natural, and E-flat above middle C, played against a pedal E-natural in the same octave. These closelygrouped notes generate in turn many lines and sounds which have strong influence on all major areas of the music.

"The SEXTET was commissioned by the Koussevitsky Foundation in the Library of Congress and is dedicated to the memory of Serge and Natalie Koussevitsky. It received its first performance in the Coolidge Auditorium in the Library of Congress by the Juilliard Quartet with John Graham, viola, and William Masselos, piano, on April 27, 1972."

#### **DONALD ERB**

THREE PIECES FOR BRASS QUINTET AND PIANO

New York Brass Quintet (Robert Nagel, Paul Ingraham, Allan Dean, John Swallow, Thompson Hanks); James Smolko, piano; Matthias Bamert, conductor

DONALD ERB (b. Youngstown O., 1927) is one of today's most versatile and widely performed composers. He works in a variety of media, often to startling effect. His *Symphony of Overtures* has been played by the major orchestras of Boston, Philadelphia, Cleveland, Washington, D.C., Dallas, Atlanta, Oregon, Seattle, Indianapolis and other cities. Erb studied at Kent State University, the Cleveland Institute and Indiana University (D.M. 1964), and has taught at Bowling Green State University and at Case Institute of Technology. He has appeared as conductor/lecturer and composer-in-residence at many educational institutions across the nation. He is composer-in-residence at the Cleveland Institute of Music and holder of the Kulas Chair in Composition there as well as director of its Electronic Music Laboratory.

Erb writes: "THREE PIECES FOR BRASS QUINTET AND PIANO was commissioned by Wisconsin State University at River Falls for a brass quintet in residence headed by composer-trumpeter Conrad de Jong. The work was completed in 1968.

"Cast in a classic mold of three movements, the work contains many facets of brass writing. The first movement utilizes many things one can do with a brass instrument without actually 'playing' it. The slow movement stresses the more elegant aspects of brass playing and uses, to some extent, double muting. It is also in the classic sense the lyric movement. The final movement is a hard driving piece which employs techniques learned from my years as a jazz trumpeter. It is hopefully a showcase for brass players."

#### GEORGE EDWARDS

KREUZ UND QUER (1971)

Boston Musica Viva (Jóhn Heiss, flute; William G. Wrzesien, clarinet; Nancy Cirillo, violin; Marcus Thompson, viola; Bruce Coppock, cello), Richard Pittman, conductor

GEORGE EDWARDS (b. Boston, 1943) studied composition with Richard Hoffmann at Oberlin College and with Earl Kim and Milton Babbitt at Princeton. In 1967 he was a fellow at the Berkshire Music Center, Tanglewood, where he was awarded the Koussevitsky Prize. After teaching at the New England Conservatory of Music from 1968 to 1973, he received a Prix de Rome. His STRING QUARTET is on CRI 265. He writes:

"KREUZ UND QUER, written for the Boston Musica Viva, was first performed by them in November 1971 in Cambridge, Mass. It is one of a series of short pieces in which I attempted to concentrate both a wide variety of material (textures, tempi, etc.) and a wide variety of ways of getting from one kind of material to another. In KREUZ UND QUER, the range of character is roughly that of a serenade, while the pacing involves sudden changes, long transitions, pun-like repetitions of previous material in new contexts, and rare moments of complete repose."

## ROBERT MACDOUGALL ANACOLUTHON: A CONFLUENCE (1972)

Contemporary Music Ensemble (Paul Dunkel, flute; Allen Blustine, clarinet; George Haas, oboe; Allen Dean, trumpet; Donald Palma, clarinet; Christopher Finkel, violin; Eric Wilson, viola; Timothy Eddy, cello); Arthur Weisberg, conductor

ROBERT MACDOUGALL (b. San Diego, Cal., 1941) played piano and violin and spent three years as a Marine before coming to composition as a student at Berkeley, California. He then went to Peabody Conservatory for his B.M. and to U. C. San Diego for his M.A. (1972); he subsequently studied both music and drama there. He has been a member of Kenneth Gaburo's virtuoso performing group NCME III (CRI 316) and is increasingly involved in multi-media composition. He spends most of his summers in the Northwest as a Forest Service fire lookout.